

Complaint

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IN THE MATTER OF

IRVING-FREDERICK, INC., ET AL.

CONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF
THE FEDERAL TRADE COMMISSION, THE WOOL PRODUCTS LABELING
AND THE FUR PRODUCTS LABELING ACTS

Docket C-677. Complaint, Jan. 9, 1964—Decision, Jan. 9, 1964

Consent order requiring two associated retailers of fur products in San Francisco, Calif., to cease violating the Fur Products Labeling Act by failing, in labeling and invoicing, to show the true animal name of fur and when fur was bleached or dyed; failing to disclose, in invoicing, the country of origin of imported furs; failing to use the term "Natural" in labeling, invoicing, and advertising to describe fur products which were not artificially colored; substituting nonconforming labels for those affixed by the manufacturer or distributor; and failing in other respects to comply with provisions of the Act; and to cease violating the Wool Products Labeling Act by failing to label wool products as required and removing labels or other identification prior to ultimate sale.

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, the Fur Products Labeling Act and the Wool Products Labeling Act of 1939, and by virtue of the authority vested in it by said Acts, the Federal Trade Commission having reason to believe that Irving-Frederick, Inc., a corporation, and Irving Bartel and Mrs. Joseph Nagel, individually and as officers of said corporation; and Irving Bartel, Inc., a corporation, and Irving Bartel, Gerson Bartel, and Ben Bartel, individually and as officers of said corporation, hereinafter referred to as respondents have violated the provisions of said Acts and Rules and Regulations promulgated under the Fur Products Labeling Act and the Wool Products Labeling Act of 1939, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:

PARAGRAPH 1. Respondent Irving-Frederick, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of California.

Respondents Irving Bartel and Mrs. Joseph Nagel are officers of the corporate respondent and formulate, direct and control the acts, practices and policies of the said corporate respondent including those hereinafter set forth.

Respondent Irving Bartel, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of California.

Respondents Irving Bartel, Gerson Bartel, and Ben Bartel are officers of corporate respondent Irving Bartel, Inc., and formulate, direct and control the acts, practices and policies of this corporate respondent, including those hereinafter set forth.

Corporate respondent Irving-Frederick, Inc., and individual respondents Irving Bartel and Mrs. Joseph Nagel are retailers of fur products, with their office and principal place of business located at 775 Market Street, city of San Francisco, State of California.

Corporate respondent Irving Bartel, Inc., and individual respondents Irving Bartel, Gerson Bartel, and Ben Bartel are retailers of fur products, with their office and principal place of business located at 812 Market Street, city of San Francisco, State of California.

PAR. 2. Subsequent to the effective date of the Fur Products Labeling Act on August 9, 1952, respondents have been and are now engaged in the introduction into commerce, and in the sale, advertising, and offering for sale in commerce, and in the transportation and distribution in commerce, of fur products; and have sold, advertised, offered for sale, transported and distributed fur products which have been made in whole or in part of furs which have been shipped and received in commerce as the terms "commerce", "fur" and "fur product" are defined in the Fur Products Labeling Act.

PAR. 3. Certain of said fur products were misbranded in that they were falsely and deceptively labeled or otherwise falsely and deceptively identified with respect to the name or designation of the animal or animals that produced the fur from which the said fur products had been manufactured, in violation of Section 4(1) of the Fur Products Labeling Act.

PAR. 4. Certain of said fur products were misbranded in that they were not labeled as required under the provisions of Section 4(2) of the Fur Products Labeling Act and in the manner and form prescribed by the Rules and Regulations promulgated thereunder.

Among such misbranded fur products, but not limited thereto, were fur products with labels which failed:

1. To show the true animal name of the fur used in the fur product.
2. To disclose that the fur contained in the fur product was bleached, dyed, or otherwise artificially colored, when such was the fact.
3. To show the country of origin of the imported furs contained in the fur product.

PAR. 5. Certain of said fur products were misbranded in violation of the Fur Products Labeling Act in that they were not labeled

in accordance with the Rules and Regulations promulgated thereunder in the following respects:

(a) The term "natural" was not used on labels to describe fur products which were not pointed, bleached, dyed, tip-dyed, or otherwise artificially colored, in violation of Rule (19(g) of said Rules and Regulations.

(b) Information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder was mingled with non-required information, in violation of Rule 29(a) of said Rules and Regulations.

(c) Information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder was set forth in handwriting on labels, in violation of Rule 29(b) of said Rules and Regulations.

PAR. 6. Certain of said fur products were falsely and deceptively invoiced by the respondents in that they were not invoiced as required by Section 5(b)(1) of the Fur Products Labeling Act and the Rules and Regulations promulgated under such Act.

Among such falsely and deceptively invoiced fur products, but not limited thereto, were fur products covered by invoices which failed:

1. To show the true animal name of the fur used in the fur product.

2. To show that the fur contained in the fur product was bleached, dyed, or otherwise artificially colored, when such was the fact.

PAR. 7. Certain of said fur products were falsely and deceptively invoiced in violation of the Fur Products Labeling Act in that they were not invoiced in accordance with the Rules and Regulations promulgated thereunder in the following respects:

(a) The term "natural" was not used on invoices to describe fur products which were not pointed, bleached, dyed, tip-dyed or otherwise artificially colored, in violation of Rule 19(g) of said Rules and Regulations.

(b) Required item numbers were not set forth on invoices, in violation of Rule 40 of said Rules and Regulations.

PAR. 8. Certain of said fur products were advertised in issues of the San Francisco Chronicle and the San Francisco Examiner, newspapers published in the city of San Francisco, State of California. Said advertisements were intended to aid, promote and assist, directly or indirectly, in the sale and offering for sale of such fur products.

PAR. 9. By means of the aforesaid advertisements and others of similar import and meaning not specifically referred to herein, respondents falsely and deceptively advertised fur products in viola-

tion of the Fur Products Labeling Act by virtue of the fact that said fur products were not advertised in accordance with the Rules and Regulations promulgated thereunder, in that the term "natural" was not used to describe fur products which were not pointed, bleached, dyed, tip-dyed or otherwise artificially colored, in violation of Rule 19(g) of the said Rules and Regulations.

PAR. 10. Respondents, in introducing, selling, advertising, and offering for sale, in commerce, and in processing for commerce, fur products; and in selling, advertising, offering for sale and processing fur products which have been shipped and received in commerce, have misbranded such fur products by substituting thereon, labels which did not conform to the requirements of Section 4 of the Fur Products Labeling Act, for the labels affixed to said fur products by the manufacturer or distributor pursuant to Section 4 of said Act, in violation of Section 3(e) of said Act.

PAR. 11. Respondents, in substituting labels as provided for in Section 3(e) of the Fur Products Labeling Act, have failed to keep and preserve the records required, in violation of said Section 3(e) and Rule 41 of the Rules and Regulations promulgated under the said Act.

PAR. 12. The acts and practices of respondents, as set forth above, were and are in violation of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder and constitute unfair and deceptive acts and practices and unfair methods of competition in commerce under the Federal Trade Commission Act.

PAR. 13. Subsequent to the effective date of the Wool Products Labeling Act of 1939, respondents have introduced into commerce, sold, transported, distributed, delivered for shipment, and offered for sale in commerce, as "commerce" is defined in said Act, wool products as "wool product" is defined therein.

PAR. 14. Certain of said wool products were misbranded by respondents in that they were not stamped, tagged, labeled or otherwise identified with the information required under Section 4(a)(2) of the Wool Products Labeling Act of 1939 and in the manner and form as required by the Rules and Regulations promulgated under said Act.

PAR. 15. Respondents with the intent of violating the provisions of the Wool Products Labeling Act of 1939 have removed or caused or participated in the removal of the stamp, tag, label or other identification required by the Wool Products Labeling Act of 1939 to be affixed to wool products subject to the provisions of such Act, prior to the time such wool products were sold and delivered to the ultimate consumer, in violation of Section 5 of said Act.

PAR. 16. The acts and practices of the respondents as set forth above in Paragraphs 12, 13, 14 and 15 were, and are, in violation of the Wool Products Labeling Act of 1939 and the Rules and Regulations promulgated thereunder, and constituted and now constitute, unfair and deceptive acts and practices and unfair methods of competition in commerce, within the intent and meaning of the Federal Trade Commission Act.

DECISION AND ORDER

The Commission having heretofore determined to issue its complaint charging the respondents named in the caption hereof with violation of the Federal Trade Commission Act, the Fur Products Labeling Act and the Wool Products Labeling Act of 1939, and the respondents having been served with notice of said determination and with a copy of the complaint the Commission intended to issue, together with a proposed form of order; and

The respondents and counsel for the Commission having thereafter executed an agreement containing a consent order, an admission by respondents of all the jurisdictional facts set forth in the complaint to issue herein, a statement that the signing of said agreement is for settlement purposes only and does not constitute an admission by respondents that the law has been violated as set forth in such complaint, and waivers and provisions as required by the Commission's rules; and

The Commission, having considered the agreement, hereby accepts same, issues its complaint in the form contemplated by said agreement, makes the following jurisdictional findings, and enters the following order:

1. Respondent Irving-Frederick, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of California, with its office and principal place of business located at 775 Market Street, city of San Francisco, State of California.

Respondents Irving Bartel and Mrs. Joseph Nagel are officers of Irving-Frederick, Inc., and their address is the same as that of said corporation.

Respondent Irving Bartel, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of California, with its office and principal place of business located at 812 Market Street, city of San Francisco, State of California.

Respondents Irving Bartel, Gerson Bartel and Ben Bartel are officers of Irving Bartel, Inc., and their address is the same as that of said corporation.

2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondents and the proceeding is in the public interest.

ORDER

It is ordered, That respondents Irving-Frederick, Inc., a corporation, and Irving Bartel and Mrs. Joseph Nagel, individually and as officers of said corporation, Irving Bartel, Inc., a corporation, and Irving Bartel, Gerson Bartel, and Ben Bartel, individually and as officers of said corporation, and respondents' representatives, agents and employees, directly or through any corporate or other device, in connection with the introduction into commerce, or the sale, advertising or offering for sale in commerce, or the transportation or distribution in commerce, of any fur product; or in connection with the sale, advertising, offering for sale, transportation or distribution, of any fur product which is made in whole or in part of fur which has been shipped and received in commerce, as "commerce", "fur" and "fur product" are defined in the Fur Products Labeling Act, do forthwith cease and desist from:

A. Misbranding fur products by:

1. Falsely or deceptively labeling or otherwise identifying any such fur product as to the name or identification of the animal or animals that produced the fur contained in the fur product.

2. Failing to affix labels to fur products showing in words and figures plainly legible all the information required to be disclosed by each of the subsections of Section 4(2) of the Fur Products Labeling Act.

3. Failing to set forth the term "Natural" as part of the information required to be disclosed on labels under the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder to describe fur products which are not pointed, bleached, dyed, tip-dyed, or otherwise artificially colored.

4. Setting forth information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder mingled with non-required information on labels affixed to fur products.

5. Setting forth information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder in handwriting on labels affixed to fur products.

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B. Falsely or deceptively invoicing fur products by:

1. Failing to furnish invoices to purchasers of fur products showing in words and figures plainly legible all the information required to be disclosed in each of the subsections of Section 5(b)(1) of the Fur Products Labeling Act.

2. Failing to set forth the term "Natural" as part of the information required to be disclosed on invoices under the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder, to describe fur products which are not pointed, bleached, dyed, tip-dyed or otherwise artificially colored.

3. Failing to set forth on invoices the item number or mark assigned to fur products.

C. Falsely or deceptively advertising fur products through the use of any advertisement, representation, public announcement or notice which is intended to aid, promote or assist, directly or indirectly, in the sale, or offering for sale of any fur product and which:

Fails to set forth the term "Natural" as part of the information required to be disclosed in advertisements under the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder to describe fur products which are not pointed, bleached, dyed, tip-dyed or otherwise artificially colored.

It is further ordered, That respondents Irving-Frederick, Inc., a corporation, and Irving Bartel and Mrs. Joseph Nagel, individually and as officers of said corporation, Irving Bartel, Inc., a corporation, and Irving Bartel, Gerson Bartel, and Ben Bartel, individually and as officers of said corporation, and respondents' representatives, agents and employees, directly or through any corporate or other device, in connection with the introduction, sale, advertising or offering for sale, in commerce, or the processing for commerce, of fur products; or in connection with the selling, advertising, offering for sale, or processing of fur products which have been shipped and received in commerce, do forthwith cease and desist from:

A. Misbranding fur products by substituting for the labels affixed to such fur products pursuant to Section 4 of the Fur Products Labeling Act labels which do not conform to the requirements of the aforesaid Act and the Rules and Regulations promulgated thereunder.

B. Failing to keep and preserve the records required by the Fur Products Labeling Act and the Rules and Regulations

promulgated thereunder in substituting labels as permitted by Section 3(e) of the said Act.

It is further ordered, That respondents Irving-Frederick, Inc., a corporation, and Irving Bartel and Mrs. Joseph Nagel, individually and as officers of said corporation, Irving Bartel, Inc., a corporation, and Irving Bartel, Gerson Bartel, and Ben Bartel, individually and as officers, of said corporation, and respondents' representatives, agents and employees, directly or through any corporate or other device, in connection with the introduction into commerce, or the offering for sale, sale, transportation or delivery for shipment, in commerce, of any wool product, as "wool product" and "commerce" are defined in the Wool Products Labeling Act of 1939, do forthwith cease and desist from failing to securely affix to or place on each product, a stamp, tag, label or other means of identification showing in a clear and conspicuous manner each element of information required to be disclosed by Section 4(a)(2) of the Wool Products Labeling Act of 1939.

It is further ordered, That respondents Irving-Frederick, Inc., a corporation, and Irving Bartel and Mrs. Joseph Nagel, individually and as officers of said corporation, Irving Bartel, Inc., a corporation, and Irving Bartel, Gerson Bartel, and Ben Bartel, individually and as officers of said corporation, and respondents' representatives, agents and employees, directly or through any corporate or other device, do forthwith cease and desist from removing, or causing or participating in the removal of any stamp, tag, label or other means of identification affixed to any wool product subject to the provisions of the Wool Products Labeling Act of 1939 with intent to violate the provisions of the said Act.

It is further ordered, That the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with this order.

IN THE MATTER OF

GLOTZER AND GLOTZER, INC., ET AL.

CONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE
FEDERAL TRADE COMMISSION AND THE FUR PRODUCTS LABELING ACTS

Docket C-678. Complaint, Jan. 13, 1964—Decision, Jan. 13, 1964

Consent order requiring retail furriers in Hartford, Conn., to cease violating the Fur Products Labeling Act by failing, in labeling, invoicing and adver-

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tising, to show the true animal name of fur and to use the term "Natural" where required; failing to show the registered identification of the manufacturer on labels and the country of origin of imported furs on invoices; invoicing "Spotted Cat" falsely as "Leopard Cat"; advertising prices as reduced from usual retail prices which were fictitious; failing to keep adequate records as a basis for pricing claims; substituting nonconforming labels for those originally affixed to fur products, and failing to comply in other respects with requirements of the Act.

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act and the Fur Products Labeling Act and by virtue of the authority vested in it by said Acts, the Federal Trade Commission having reason to believe that Glotzer and Glotzer, Inc., a corporation, and Isadore Glotzer, Sara Glotzer and William B. Glotzer, individually and as officers of said corporation, hereinafter referred to as respondents have violated the provisions of said Acts and the Rules and Regulations promulgated under the Fur Products Labeling Act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:

PARAGRAPH 1. Respondent Glotzer and Glotzer, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Connecticut.

Respondents Isadore Glotzer, Sara Glotzer and William B. Glotzer are officers of the corporate respondent and formulate, direct and control the acts, practices and policies of the said corporate respondent including those hereinafter set forth.

Respondents are retailers of fur products with their office and principal place of business located at 240 Trumbull Street, Hartford, Connecticut.

PAR. 2. Subsequent to the effective date of the Fur Products Labeling Act on August 9, 1952, respondents have been and are now engaged in the introduction into commerce, and in the sale, advertising and offering for sale in commerce, and in the transportation and distribution in commerce, of fur products; and have sold, advertised, offered for sale, transported and distributed fur products which have been made in whole or in part of furs which have been shipped and received in commerce, as the terms "commerce", "fur" and "fur product" are defined in the Fur Products Labeling Act.

PAR. 3. Certain of said fur products were misbranded in that they were not labeled as required under the provisions of Section 4(2) of the Fur Products Labeling Act and in the manner and form prescribed by the Rules and Regulations promulgated thereunder.

Among such misbranded fur products, but not limited thereto, were fur products with labels which failed:

1. To show the true animal name of the fur used in the fur product.
2. To show the name, or other identification issued and registered by the Commission, of one or more of the persons who manufactured such fur product for introduction into commerce, introduced it into commerce, sold it in commerce, advertised or offered it for sale, in commerce, or transported or distributed it in commerce.

PAR. 4. Certain of said fur products were misbranded in violation of the Fur Products Labeling Act in that they were not labeled in accordance with the Rules and Regulations promulgated thereunder in the following respects:

1. The term "natural" was not used on labels to describe fur products which were not pointed, bleached, dyed, tip-dyed, or otherwise artificially colored, in violation of Rule 19(g) of said Rules and Regulations.
2. Information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder was set forth in handwriting on labels, in violation of Rule 29(b) of said Rules and Regulations.
3. Information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder was not set forth in the required sequence, in violation of Rule 30 of said Rules and Regulations.
4. Required item numbers were not set forth on labels, in violation of Rule 40 of said Rules and Regulations.

PAR. 5. Certain of said fur products were falsely and deceptively invoiced by the respondents in that they were not invoiced as required by Section 5(b)(1) of the Fur Products Labeling Act and the Rules and Regulations promulgated under such Act.

Among such falsely and deceptively invoiced fur products, but not limited thereto, were fur products covered by invoices which failed:

1. To show the true animal name of the fur used in the fur product.
2. To disclose that the fur contained in the fur product was bleached, dyed, or otherwise artificially colored, when such was the fact.
3. To show the country of origin of imported furs used in fur products.

PAR. 6. Certain of said fur products were falsely and deceptively invoiced with respect to the name or designation of the animal or animals that produced the fur from which the said fur products

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had been manufactured, in violation of Section 5(b)(2) of the Fur Products Labeling Act.

Among such falsely and deceptively invoiced fur products, but not limited thereto were fur products which were invoiced as "Leopard Cat" when, in fact, the fur contained in such fur products was "Spotted Cat".

PAR. 7. Certain of said fur products were falsely and deceptively invoiced in violation of the Fur Products Labeling Act in that they were not invoiced in accordance with the Rules and Regulations promulgated thereunder in the following respects:

(a) Information required under Section 5(b)(1) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder was set forth on invoices in abbreviated form, in violation of Rule 4 of said Rules and Regulations.

(b) The term "natural" was not used on invoices to describe fur products which were not pointed, bleached, dyed, tip-dyed or otherwise artificially colored, in violation of Rule 19(g) of said Rules and Regulations.

(c) Required item numbers were not set forth on invoices, in violation of Rule 40 of said Rules and Regulations.

PAR. 8. Certain of said fur products were falsely and deceptively advertised in violation of the Fur Products Labeling Act in that certain advertisements intended to aid, promote and assist, directly or indirectly, in the sale and offering for sale of such fur products were not in accordance with the provisions of Section 5(a) of the said Act.

Among and included in the aforesaid advertisements but not limited thereto, were advertisements of respondents which appeared in issues of the Hartford Courant, a newspaper published in the city of Hartford, State of Connecticut.

Among such false and deceptive advertisements, but not limited thereto were advertisements which failed to show the true animal name of the fur used in the fur product.

PAR. 9. By means of the aforesaid advertisements and others of similar import and meaning not specifically referred to herein respondents falsely and deceptively advertised fur products in violation of the Fur Products Labeling Act in that the said fur products were not advertised in accordance with the Rules and Regulations promulgated thereunder inasmuch as the term "natural" was not used to describe fur products which were not pointed, bleached, dyed, tip-dyed or otherwise artificially colored, in violation of Rule 19(g) of the said Rules and Regulations.

PAR. 10. By means of the aforesaid advertisements and other advertisements of similar import and meaning not specifically re-

ferred to herein, respondents falsely and deceptively advertised fur products in that said advertisements represented that the prices of fur products were reduced from regular or usual retail prices and that the amount of such price reductions afforded savings to the purchasers of respondents' products when the so-called regular or usual retail prices were in fact fictitious in that they were not the prices at which said merchandise was usually sold by respondents in the recent regular course of business and the said fur products were not reduced in price as represented and the represented savings were not thereby afforded to the purchasers, in violation of Section 5(a)(5) of the Fur Products Labeling Act and Rule 44(a) of the Rules and Regulations promulgated under the said Act.

PAR. 11. In advertising fur products for sale, as aforesaid, respondents made pricing claims and representations of the types covered by subsections (a), (b), (c) and (d) of Rule 44 of the Regulations under the Fur Products Labeling Act. Respondents in making such claims and representations failed to maintain full and adequate records disclosing the facts upon which such pricing claims and representations were based, in violation of Rule 44(e) of the said Rules and Regulations.

PAR. 12. Respondents in introducing, selling, advertising, and offering for sale, in commerce, and in processing for commerce, fur products; and in selling, advertising, offering for sale and processing fur products which have been shipped and received in commerce, have misbranded such fur products by substituting thereon, labels which did not conform to the requirements of Section 4 of the Fur Products Labeling Act, for the labels affixed to said fur products by the manufacturer or distributor pursuant to Section 4 of said Act, in violation of Section 3(e) of said Act.

PAR. 13. Respondents in substituting labels as provided for in Section 3(e) of the Fur Products Labeling Act, have failed to keep and preserve the records required, in violation of said Section 3(e) and Rule 41 of the Rules and Regulations promulgated under the said Act.

PAR. 14. The aforesaid acts and practices of respondents, as herein alleged, are in violation of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder and constitute unfair and deceptive acts and practices and unfair methods of competition in commerce under the Federal Trade Commission Act.

DECISION AND ORDER

The Commission having heretofore determined to issue its complaint charging the respondents named in the caption hereof with

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violation of the Federal Trade Commission Act and the Fur Products Labeling Act, and the respondents having been served with notice of said determination and with a copy of complaint the Commission intended to issue, together with a proposed form of order; and

The respondents and counsel for the Commission having thereafter executed an agreement containing a consent order, an admission by respondents of all the jurisdictional facts set forth in the complaint to issue herein, a statement that the signing of said agreement is for settlement purposes only and does not constitute an admission by respondents that the law has been violated as set forth in such complaint, and waivers and provisions as required by the Commission's rules; and

The Commission, having considered the agreement, hereby accepts same, issues its complaint in the form contemplated by said agreement, makes the following jurisdictional findings, and enters the following order:

1. Respondent Glotzer and Glotzer, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Connecticut with its office and principal place of business located at 240 Trumbull Street, Hartford, Connecticut.

Respondents Isadore Glotzer, Sara Glotzer and William B. Glotzer are officers of said corporate respondent.

2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondents and the proceeding is in the public interest.

ORDER

It is ordered, That respondents Glotzer and Glotzer, Inc., a corporation, and its officers, and Isadore Glotzer, Sara Glotzer and William B. Glotzer, individually and as officers of said corporation and respondents' representatives, agents and employees, directly or through any corporate or other device, in connection with the introduction, into commerce, or the sale, advertising or offering for sale in commerce, or the transportation or distribution in commerce, of any fur product; or in connection with the sale, advertising, offering for sale, transportation or distribution, of any fur product which is made in whole or in part of fur which has been shipped and received in commerce, as the terms "commerce", "fur" and "fur product" are defined in the Fur Products Labeling Act, do forthwith cease and desist from:

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A. Misbranding fur products by:

1. Failing to affix labels to fur products showing in words and in figures plainly legible all of the information required to be disclosed by each of the subsections of Section 4(2) of the Fur Products Labeling Act.

2. Failing to set forth the term "Natural" as part of the information required to be disclosed on labels under the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder to describe fur products which are not pointed, bleached, dyed, tip-dyed, or otherwise artificially colored.

3. Setting forth information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder in handwriting on labels affixed to fur products.

4. Failing to set forth information required under Section 4(2) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder on labels in the sequence required by Rule 30 of the aforesaid Rules and Regulations.

5. Failing to set forth on labels the item number or mark assigned to a fur product.

B. Falsely or deceptively invoicing fur products by:

1. Failing to furnish invoices to purchasers of fur products showing in words and figures plainly legible all the information required to be disclosed in each of the subsections of Section 5(b)(1) of the Fur Products Labeling Act.

2. Setting forth on invoices pertaining to fur products any false or deceptive information with respect to the name or designation of the animal or animals that produced the fur contained in such fur product.

3. Setting forth information required under Section 5(b)(1) of the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder in abbreviated form.

4. Failing to set forth the term "Natural" as part of the information required to be disclosed on invoices under the Fur Products Labeling Act and Rules and Regulations promulgated thereunder to describe fur products which are not pointed, bleached, dyed, tip-dyed or otherwise artificially colored.

5. Failing to set forth on invoices the item number or mark assigned to fur products.

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C. Falsely or deceptively advertising fur products through the use of any advertisement, representation, public announcement or notice which is intended to aid, promote, or assist, directly or indirectly, in the sale, or offering for sale of any fur product, and which:

1. Fails to set forth in words and figures plainly legible all the information required to be disclosed by each of the subsections of Section 5(a) of the Fur Products Labeling Act.

2. Fails to set forth the term "Natural" as part of the information required to be disclosed in advertisements under the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder to describe fur products which are not pointed, bleached, dyed, tip-dyed or otherwise artificially colored.

3. Represents, directly or by implication, that any price, when accompanied or unaccompanied by any descriptive language, was the price at which the merchandise advertised was usually and customarily sold at retail by the respondents unless such advertised merchandise was in fact usually and customarily sold at retail at such price by respondents in the recent past.

4. Misrepresents in any manner the savings available to purchasers of respondents' fur products.

5. Falsely or deceptively represents in any manner that prices of respondents' fur products are reduced.

D. Making claims and representations of the types covered by subsections (a), (b), (c) and (d) of Rule 44 of the Rules and Regulations promulgated under the Fur Products Labeling Act unless there are maintained by respondents full and adequate records disclosing the facts upon which such claims and representations are based.

It is further ordered. That Glotzer and Glotzer, Inc., a corporation and its officers and Isadore Glotzer, Sara Glotzer and William B. Glotzer individually and as officers of the said corporation and respondents' representatives, agents and employees, directly or through any corporate or other device, in connection with the introduction, sale, advertising or offering for sale, in commerce, or the processing for commerce, of fur products; or in connection with the selling, advertising, offering for sale, or processing of fur products which have been shipped and received in commerce, do forthwith cease and desist from:

- A. Misbranding fur products by substituting for the labels affixed to such fur products pursuant to Section 4 of the Fur

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Products Labeling Act labels which do not conform to the requirements of the aforesaid Act and the Rules and Regulations promulgated thereunder.

B. Failing to keep and preserve the records required by the Fur Products Labeling Act and the Rules and Regulations promulgated thereunder in substituting labels as permitted by Section 3(e) of the said Act.

It is further ordered, That the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with this order.

IN THE MATTER OF

K. P. INDUSTRIES, INC., ET AL.

CONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE
FEDERAL TRADE COMMISSION ACT

Docket C-679. Complaint, Jan. 13, 1964—Decision, Jan. 13, 1964

Consent order requiring Chicago distributors of various automotive products, including a kit designated as "CHROME & ALUMINUM TOUCH-UP" consisting of two components, "MAGICCHROME CLEANER" and "MAGICCHROME," to cease representing falsely, in advertising and by the aforesaid trade names, that the products contained chrome and would restore chrome, stop rust and render metal impervious to weather, corrosion and salt, and fully guaranteed.

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, and by virtue of the authority vested in it by said Act, the Federal Trade Commission, having reason to believe that K. P. Industries, Inc., a corporation, and Yale Engineering Company, a corporation, and William M. Karesh and Morton J. Smith, individually and as officers of said corporations, hereinafter referred to as respondents, have violated the provisions of the said Act, and it appearing to the Commission that a proceeding by it would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:

PARAGRAPH 1. Respondent, K. P. Industries, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois with its principal office and place of business located at 900 North Franklin Street, in the city of Chicago, State of Illinois.

Respondent, Yale Engineering Company, is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois, with its principal office and place of business located at 900 North Franklin Street, in the city of Chicago, State of Illinois.

Respondents, William M. Karesh and Morton J. Smith, are officers of each of the said corporations. They formulate, direct and control the acts and practices of each of the said corporations. Their address is the same as that of the corporate respondents.

All of the respondents, both corporate and individual, have cooperated and acted together in carrying out the acts and practices hereinafter set forth.

PAR. 2. Respondents are now, and for some time last past have been, engaged in the advertising, offering for sale, sale and distribution of various automotive products, including a product designated as "Chrome & Aluminum Touch-Up" which is a kit consisting of two component parts designated as "Magichrome Cleaner" and "Magichrome", to jobbers, wholesalers and retail chain stores for resale to the public; both "Magichrome Cleaner" and "Magichrome" can be and are sold individually, but in the normal course of business, are sold as part of the kit.

PAR. 3. In the course and conduct of their business, respondents now cause, and for some time last past have caused, their said products, "Chrome & Aluminum Touch-Up", "Magichrome Cleaner", and "Magichrome", when sold, to be shipped from their place of business in the State of Illinois to purchasers thereof located in various other States of the United States and in the District of Columbia, and maintain, and at all times mentioned herein have maintained, a substantial course of trade in said products in commerce, as "commerce" is defined in the Federal Trade Commission Act.

PAR. 4. In the course and conduct of their business, and for the purpose of inducing sales of "Chrome & Aluminum Touch-Up", and the components, "Magichrome Cleaner" and "Magichrome", respondents have made certain statements and representations, of which the following are typical, but not all inclusive:

a. CHROME & ALUMINUM TOUCH-UP

Amazing Chrome Refinishing Kit.

Refinishes Rusty Chrome

Cleans and Restores Dirty Chrome

Refinishes rusty chrome with a layer of glowing metal!

Cleans the original chrome, restoring its brilliant beauty!

Protects year 'round against weather, salt and corrosion!

Stops further rusting.

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Rusty chrome every motorist's problem * * *

Now YALE'S wonderfully simple and effective chrome Touch-Up kit answers this problem * * * So easy to use that anybody can get beautiful results immediately. Simply clean the chrome with magichrome cleaner, dab on magichrome, let dry, and polish gently to blend with remaining original chrome. Imagine! Beautiful chrome again, with a chrome Touch-Up Kit for only \$1.95.

b. MAGICHROME CLEANER

Restores dirty chrome to its original beauty.

The most effective chrome cleaner on the market.

c. MAGICHROME

Refinishes rusty chrome * * *

Contains powdered metal in a special base.

Sets in seconds, polishes to a glowing lustre.

Impervious to weather, corrosion, or salt.

Stops further rusting * * *

d. Satisfaction guaranteed or money back!

PAR. 5. By and through the use of the aforesaid statements and representations, and others of similar import but not specifically set forth herein, and by and through the use of the product names "Chrome & Aluminum Touch-Up", "Magichrome Cleaner", and "Magichrome", respondents have represented, directly and by implication, that:

1. "Chrome & Aluminum Touch-Up", "Magichrome Cleaner", and "Magichrome" contain chrome;
2. Their aforesaid products will not restore or refinish chrome;
3. The use of said products will stop rust and render metal impervious to weather, corrosion and salt;
4. The use of said products will remove rust instantly or effortlessly;
5. The said products are fully guaranteed in all respects.

PAR. 6. In truth and in fact:

1. "Chrome & Aluminum Touch-Up", "Magichrome Cleaner", and "Magichrome" do not contain chrome;
2. Their aforesaid products will not restore or refinish chrome;
3. Their aforesaid products will not stop rust and will not render metal impervious to weather, corrosion or salt;
4. Their aforesaid products will not remove rust instantly or effortlessly.
5. Their aforesaid products are not guaranteed in all respects and the nature and extent of the guarantee and the manner in which the guarantor will perform are not set forth.

Therefore, the statements and representations set forth in Paragraphs 4 and 5 hereof were and are false, misleading and deceptive.

PAR. 7. Respondents' said acts and practices further serve to place in the hands of others the means and instrumentalities through which the purchasing public may be misled with respect to the statements and representations set forth in Paragraphs 4 and 5 herein.

PAR. 8. In the conduct of their business, at all times mentioned herein, respondents have been in substantial competition, in commerce, with corporations, firms and individuals in the sale of products of the general kind and nature as that sold by respondents.

PAR. 9. The use of the aforesaid false, misleading and deceptive statements, representations and practices has had, and now has, the capacity and tendency to mislead members of the purchasing public into the erroneous and mistaken belief that said statements and representations were and are true and into the purchase of substantial quantities of respondents' products by reason of said erroneous and mistaken belief.

PAR. 10. The aforesaid acts and practices of respondents, as herein alleged, were and are all to the prejudice and injury of the public and constituted, and now constitute, unfair methods of competition in commerce and unfair and deceptive acts and practices in commerce, in violation of Section 5 of the Federal Trade Commission Act.

DECISION AND ORDER

The Commission having heretofore determined to issue its complaint charging the respondents named in the caption hereof with violation of the Federal Trade Commission Act, and the respondents having been served with notice of said determination and with a copy of the complaint the Commission intended to issue, together with a proposed form of order; and

The respondents and counsel for the Commission having thereafter executed an agreement containing a consent order, an admission by respondents of all the jurisdictional facts set forth in the complaint to issue herein, a statement that the signing of said agreement is for settlement purposes only and does not constitute an admission by respondents that the law has been violated as set forth in such complaint, and waivers and provisions as required by the Commission's rules; and

The Commission, having considered the agreement, hereby accepts same, issues its complaint in the form contemplated by said agreement, makes the following jurisdictional findings, and enters the following order:

1. Respondent K. P. Industries, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the

State of Illinois, with its principal office and place of business located at 900 North Franklin Street, in the city of Chicago, State of Illinois.

Respondent Yale Engineering Company is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois, with its principal office and place of business located at 900 North Franklin Street, in the city of Chicago, State of Illinois.

Respondents William M. Karesh and Morton J. Smith are officers of each of the said corporations, and their address is the same as that of the said corporations.

2. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondents and the proceeding is in the public interest.

ORDER

It is ordered, That respondents K. P. Industries, Inc., a corporation and Yale Engineering Company, a corporation, their officers, and William M. Karesh and Morton J. Smith individually and as officers of said corporations, and respondents' agents, representatives and employees, directly or through any corporate or other device, in connection with the offering for sale, sale and distribution of the product designated as "Chrome & Aluminum Touch-Up" or the component parts thereof, "Magichrome Cleaner" and "Magichrome" whether sold under the same names or any other names, or any product of similar or like composition, in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

1. Using the word "Chrome" or any other terms of similar import or meaning as part of a product name or trade name for such product, or representing in any other manner that respondents' products contain chrome.

2. Representing, directly or by implication:

- A. That the product will restore or refinish automobile chrome;

- B. That the product will stop rust or render metal impervious to weather, corrosion or salt;

- C. That the product will remove rust instantly or effortlessly or that it will be effective in removing rust in any manner not in accordance with the facts;

- D. That any of respondents' products are guaranteed, unless the nature and extent of the guarantee and the man-

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ner in which the guarantor will perform thereunder are clearly and conspicuously set forth.

3. Placing in the hands of others any means or instrumentalities by or through which they may mislead the public as to any of the matters and things set out in paragraphs 1 and 2 above.

It is further ordered. That the respondents herein shall, within sixty (60) days after service upon them of this order, file with the Commission a report in writing setting forth in detail the manner and form in which they have complied with this order.

IN THE MATTER OF
MOTOROLA, INC.

ORDER, OPINION, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE
FEDERAL TRADE COMMISSION ACT

*Docket 8473. Complaint, Mar. 23, 1962—Decision, Jan. 14, 1964**

Order requiring a Chicago distributor of radio and television sets and replacement parts therefor, to cease misrepresenting the capabilities, durability and superiority of its products, and reserving decision dealing with foreign origin of component parts.

COMPLAINT

PARAGRAPH 1. Respondent Motorola, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of Trade Commission, having reason to believe that Motorola, Inc., a corporation, hereinafter referred to as respondent, has violated the provisions of said Act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint, stating its charges as follows:

PARAGRAPH 1. Respondent Motorola, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois, with its principal office and place of business located at 4545 West Augusta Boulevard, Chicago 51, Illinois.

PAR. 2. Respondent Motorola, Inc., is now, and for some time last past has been, engaged in the advertising, offering for sale, sale and distribution of radio sets, television sets and replacement parts therefor to distributors for resale to retailers and the public.

PAR. 3. In the course and conduct of its business respondent now causes, and for some time last past has caused, its said products, when sold, to be shipped from its place of business in the State of

* Final order of March 28, 1968, further modified hearing examiner's initial decision, and dismissed for failure of proof the charges relating to foreign origin of component parts.

Illinois to purchasers thereof in various other States of the United States and in the District of Columbia and maintains, and at all times mentioned herein has maintained, a substantial course of trade in said products in commerce, as "commerce" is defined in the Federal Trade Commission Act.

PAR. 4. In the course and conduct of its business, and for the purpose of inducing the sale of its radio sets, television sets and replacement parts therefor, respondent has made certain statements with respect to the operating functions of said radio sets, television sets and replacement parts of which the following are typical:

A. Model 8x26 radio set.

* * * 9 times more selectivity * * *.

* * * * *
Like carrying a full 10-tube radio in your pocket! This pint-size power-plant packs 8 transistors and 2 germanium diodes.

* * * * *
Plays hundreds of hours at peak performance on penlite batteries you buy for pennies.

B. Model L12 radio set.

500 hours on inexpensive batteries.

REVOLUTIONARY NEW VOICE FOR THE OUT-OF-DOORS New audio system with push-pull output delivers amazing tone quality with 6 times the audible output required for normal listening.

C. Model L14 radio set (also known as MOTOROLA RANGER 1000 radio).

Revolutionary new chassis and audio system * * *.

* * * * *
Plays 500 hours on inexpensive flashlight batteries.

* * * * *
NEW FROM MOTOROLA Most powerful long-distance all-transistor portable.

D. Motorola television sets.

Golden Tube Sentry System * * * works automatically to protect every tube in the set against warm-up power surge * * * main cause of TV failure. It's engineered to eliminate 3 out of 4 service calls * * * triples TV life expectancy.

* * * * *
Only Motorola Dealers get to sell TV with * * * NEW TUBE-SAVER ELECTRON GUN * * * that makes Golden "M" Picture Tubes 10 times more reliable than ordinary picture tubes.

* * * * *
Respondent's Custom-Matic Tuner is

* * * the first tuner specifically designed for remote control.

* * * * *
Motorola's exclusive new long-distance Custom-Matic Tuner * * * Never requires fine tuning as you go from station to station.

* * * * *

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New 4-Wafer Cascode Tuner. The only tuner to turn out a stronger signal than the one it picks up.

* * * * *

A CLOSE-UP OF EXCLUSIVES IN THE ONLY TV LINE WITH COMPLETELY HAND-WIRED CHASSIS AND TUNER.

* * * * *

ALL ACROSS THE LINE: THE MOST * * * inside * * *.

Finest combination of picture-making features in TV today.

—20,000 VOLTS OF PICTURE POWER puts a brighter picture on the screen * * *.

—180 VOLTS OF VIDEO DRIVE to give picture greater contrast.

E. Model X23 radio set.

Motorola proudly introduces Model X23 which to the best of our knowledge, is the smallest six transistor American brand radio * * * ever!

PAR. 5. Through the use of the aforesaid statements, respondent has represented directly or by implication that:

A. Its Model 8x26 radio set had 9 times more capability than other sets to select a desired radio station; was comparable in power output to a 10-tube radio; and would play hundreds of hours at peak performance on low priced batteries.

B. Its Model L12 radio set would perform for 500 hours on low priced batteries; and had a revolutionary and new audio system.

C. Its Model L14 radio set contained a revolutionary or new chassis and audio system; would play 500 hours on low priced batteries; and was the most powerful long-distance all-transistor portable available.

D. Its sentry system contained in certain of its receivers was a protective device that eliminated 3 out of 4 service calls, and tripled TV life expectancy; the picture tubes contained in certain of its receivers were constructed to last 10 times longer than comparable picture tubes; its Custom-Matic Tuner contained in certain of its receivers was the first tuner specifically designed for remote control and never required fine tuning; its 4-Wafer Cascode Tuner contained in certain of its receivers was the only tuner that turned out a stronger signal than the one it picked up; its 1960 television receivers represented the only television line with completely hand-wired chassis and all sets in its 1960 television line were equipped with 20,000 volts of picture power and 180 volts of video drive.

E. Its Model X23 was composed of essential and material parts manufactured in the United States.

PAR. 6. Said statements and representations are false, misleading and deceptive. In truth and in fact:

A. Respondent's Model 8x26 radio set did not have 9 times more capability than other sets to select a desired radio station; was not

comparable in power output to a full 10-tube radio; and would not play hundreds of hours at peak performance on low priced batteries.

B. Respondent's Model L12 radio set would not perform for 500 hours on low priced batteries; and its audio system was one in general use in the radio industry and was not revolutionary or new.

C. Respondent's L14 radio set had a chassis and audio system that were in general use in the radio industry and were not revolutionary or new; would not play 500 hours on low priced batteries, and there were equally or more powerful transistor radio sets than the L14.

D. Respondent's sentry system was not a protective device that eliminated 3 out of 4 service calls or tripled TV life expectancy; respondent's picture tubes were not constructed to last 10 times longer than comparable picture tubes; respondent's Custom-Matic Tuner was not the first tuner specifically designed for remote-control and did require fine tuning; all competitive tuners turn out a stronger signal than the one picked up; respondent's 1960 television receivers were not all completely hand wired and were not all equipped with 20,000 volts of picture power and 180 volts of video drive.

E. Essential and material parts of respondent's Model X23 radio set are imported from Japan.

PAR. 7. In addition, in the course and conduct of its business, as aforesaid, respondent, before offering certain of its radio sets for sale, does not place markings on the said radio sets and their containers and does not disclose in its instructions and warranties of said sets or elsewhere that essential and material parts of said radio sets are imported from Japan. While certain encased functional parts of said radio sets bear markings indicating their manufacture in and importation from Japan, in all instances the markings are concealed or so small and indistinct that they do not constitute adequate notice to the public that such parts are not made in the United States.

PAR. 8. In the absence of an adequate disclosure that essential and material parts of a product, including radio sets, are of foreign origin, the public believes and understands that said essential and material parts are of domestic origin.

As to the aforesaid certain radio sets, a substantial portion of the purchasing public has a preference for said articles the essential and material parts of which are of domestic origin. Respondent's failure clearly and conspicuously to disclose the country of origin of essential and material parts of said articles of merchandise is, therefore, to the prejudice of the purchasing public.

PAR. 9. By the aforesaid acts and practices, respondent furnished or otherwise placed in the hands of retailers and others the means

and instrumentalities by and through which they may mislead the public as to the country of origin of said essential and material parts of certain of their radio sets.

PAR. 10. In the conduct of its business, at all times mentioned herein, respondent has been in substantial competition, in commerce, with corporations, firms and individuals in the sale of radio receivers, television receivers and replacement parts therefor of the same general kind and nature as those sold by respondent.

PAR. 11. The use by respondent of the aforesaid false, misleading and deceptive statements, representations and practices and the failure by respondent to disclose the foreign origin of material and essential parts of its radio sets have had, and now have, the capacity and tendency to mislead members of the purchasing public into the erroneous and mistaken belief that said statements and representations were and are true and into the purchase of substantial quantities of respondent's products by reason of said erroneous and mistaken belief.

PAR. 12. The aforesaid acts and practices of the respondent, as herein alleged, were and are all to the prejudice and injury of the public and of respondent's competitors and constituted, and now constitute, unfair and deceptive acts and practices and unfair methods of competition in commerce, in violation of Section 5 of the Federal Trade Commission Act.

Mr. Frank B. Dunn and Mr. Joseph P. Going for the Commission. Winston, Strawn, Smith & Patterson, by Mr. James L. Perkins, and Mr. Thomas Reynolds, Chicago, Ill., and Mr. William C. Fox, Jr., and Mr. Lewis Spencer, Franklin Park, Ill., for the respondent.

INITIAL DECISION BY MAURICE S. BUSH, HEARING EXAMINER

MARCH 21, 1963

The general issue in this matter is whether the respondent, a distributor of radio and television receivers, is in violation of the Federal Trade Practices Act¹ (a) by reason of numerous false statements and misrepresentations alleged to have been made by respondent with respect to the performance and other characteristics of said products for the purpose of inducing their sale and (b) by its failure to give adequate notice to the buying public that essential and material parts of certain radio sets it has marketed were not made in the United States. The various charges of the complaint and the evidence relating thereto and the conclusions thereon will be dealt

¹ Section 5(a)(1) of the Act, here pertinent, reads: "Unfair methods of competition in commerce, and unfair or deceptive acts or practices in commerce, are hereby declared unlawful."

with serially below in the order shown in the complaint except that wherever possible two or more related issues will be grouped together in the interest of brevity.

The complaint herein was issued on March 23, 1962. The answer was filed on April 30, 1962, and an amendment to the answer was filed on August 1, 1962. Hearing and prehearing conferences were held over a continuous period of approximately six weeks in the months of June and July 1962 at Chicago, Illinois, following which there was one additional and final day of hearing on October 10, 1962, to take the testimony of a single witness who was unable to attend the hearings in Chicago due to illness. Thereafter proposed findings of facts, conclusions of law, and arguments in support thereof were filed by the parties. These have been carefully reviewed and considered and such proposed findings and conclusions which are not herein adopted, either in the form proposed or in substance, are rejected as not supported by the record or as involving immaterial matters. The facts hereinafter set forth are based on the entire record which consists of an original and supplemental stipulations of facts, a record of over 4,000 pages, and more than 175 exhibits. The great bulk of the testimony was received from electrical engineers, is technical in nature, and conflicting between the parties.

FINDINGS OF FACT

1. *Admitted Background Facts*

Respondent, Motorola, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois, with its principal office and place of business located at 9401 West Grand, Franklin Park, Illinois. It is now, and for some time last past has been, engaged in the advertising, offering for sale, sale and distribution of radio sets, television sets and replacement parts therefor to distributors for resale to retailers and the public. Its gross sales, including the sale of many products other than radio sets, television sets and replacement parts, totalled \$289,529,444 for the year 1959 and \$299,065,992 for 1960.

In the course and conduct of its business respondent now causes, and for some time last past has caused, its said products, when sold, to be shipped from its place of business in the State of Illinois to purchasers thereof in various other States of the United States and in the District of Columbia and maintains, and at all times mentioned herein has maintained, a substantial course of trade in said products in commerce, as "commerce" is defined in the Federal Trade Commission Act.

In the conduct of its business respondent is in substantial competition, in commerce, with corporations, firms and individuals in the sale of radio receivers, television receivers and replacement parts of the same general kind and nature of those sold by respondent.

Respondent, in the conduct of its business, and for the purpose of inducing the sale of its radio sets, television sets and replacement parts therefor, has made certain statements, hereinafter set forth, with respect to the operating functions of said products.

2. *Battery Life Issues*

On the factual issues here under consideration, the complaint charges that respondent has made certain false representations with respect to the service life of batteries suitable for use in certain models of radios it manufactures or assembles and distributes. The specific false representations charged by the complaint are the following:

(a) "Its Model 8x26 radio * * * will play hundreds of hours at peak performance on low priced batteries.

(b) "Its Model L12 radio set would perform for 500 hours on low priced batteries.

(c) "Its Model L14 radio set * * * would play 500 hours on low priced batteries."

Respondent has stipulated that it made each of the foregoing representations but denies they are false, misleading and deceptive.

Each of the above designated model radios was placed on the market in 1959. The representations in question were made in various advertisements, many of them in periodicals. The above-described representation with respect to the Model 8x26 radio has been discontinued since March 1960 and the manufacture of the model was discontinued in September 1960. The above-described representation with respect to the Model L12 radio has been discontinued since March 1960 and the manufacture of the model was discontinued in January 1960. The above-described representation with respect to the Model L14 radio has been discontinued since March 1960 and the manufacture of the model was discontinued in September 1959.

In the radio manufacturing industry it is customary for radio manufacturers, including respondent, to change radio models every year.

The three radio models here under discussion are portable transistor radios requiring dry cell batteries for their operation and will operate on such well-known brand batteries as the Ever-Ready and Ray-O-Vac. Respondent recommended Ever-Ready AA, Ray-O-Vac, Mallory, Mercury and Burgess batteries for use in the Model 8x26 radio and it is stipulated that the Models L12 and L14 will operate

on Ever-Ready batteries known as No. 635. In the battery life tests hereinafter described appropriate batteries were used in the involved Motorola radio sets.

As seen the representations in question relate to the service life of batteries which can be used in respondent's Model 8x26, L12 and L14 transistor radio sets.

There are two methods in common use by the radio manufacturing industry for determining the service life of batteries used in transistor radios. One of these is known as the "Life Test" method. "Life Tests" are actual performance tests, sometimes accelerated, which are designed to simulate the useful lives of radio batteries. In such tests, an actual radio is used, equipped with fresh batteries, and operated in cycles of two, four or more hours per day until the batteries become so exhausted from use that the music or voice coming from the radio is distorted.

The other method for determining the service life of batteries designed for use in transistor radios will be designated herein as the "Laboratory Data Test" method. It involves the use of data developed and compiled over a period of many years by laboratories of battery manufacturing companies from hundreds of tests on batteries for their life potentials. In such laboratory tests, the electrical current in the battery undergoing testing is drained in cycles of two, four, or more hours per day under various degrees of drainage measured in terms of milliamperes until the battery is exhausted and records are kept of the total number of hours required to reach the point of exhaustion on batteries so tested. In such tests no radios are used; the current from the battery is drained by means other than through the actual operation of a radio. Battery operated radios are designed by their manufacturers to use specified amounts of current drain in terms of milliamperes and to operate until the batteries reach a certain predetermined cut-off voltage point which is the point at which the voltage in the batteries has been so reduced that the radio set will no longer function satisfactorily. Given the current drain measurement in milliamperes and cut-off voltage point of any model radio set, the service life of the batteries suitable for use in such radio sets can be determined from pre-existing data developed under the "Laboratory Data Test" method.

The "Life Test" and the "Laboratory Data Test" methods for determining the service life of batteries used in radios give fairly reliable estimates of battery life under controlled conditions but of the two the "Life Test" method is the more reliable because it more closely simulates and approximates actual use of a radio by the radio listening public than the "Laboratory Data Test" method. In the

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"Life Test" method an actual radio is used for the test of battery life; in the "Laboratory Data Test" method, an actual radio is not used in determining battery life but instead a constant fixed resistance load is applied to the cells under a controlled temperature.

However, in actual every day use of battery radios by listeners, the service life of a radio battery may vary considerably from listener to listener because some users turn their radios on loud and others play theirs low and because some listeners leave their radios on continuously for very long periods of time and others play theirs for only a few minutes a day. Radios turned on to high sound volumes use up more current than radios operated on low sound volumes. Radios which are used continuously for long periods of time use up more of their batteries' total electrical energy than radios which are played intermittently. This is because ordinarily the total current of a battery will be greater if it is not drawn continuously and if frequent "rest periods" are allowed. Battery life is also affected by temperatures. Batteries used in temperatures above 70 degrees Fahrenheit last longer than those used in temperatures lower than 70 degrees Fahrenheit.

The record contains the results of "Life Tests" made on Motorola Models 8x26 and L14, but none on Model L12.

The life tests on Model 8x26 were made by Theodore Githens, a radio engineer with a company in competition with respondent who testified in this proceeding under subpoena in behalf of the Commission as did all other witnesses, also chiefly electrical engineers of competing companies, called by counsel supporting the complaint. For the past 23 years, Githens has been employed by the Zenith Radio Corporation as a radio engineer. It has been part of his job at Zenith over the years to test the functional characteristics of both tube and battery radios manufactured or under development by Zenith. It has also been part of his job to test the functional characteristics of radios manufactured by competing radio companies. This testing of both Zenith radios and competing brands of radios has included measurements for sensitivity, power output, selectivity, image rejection, and battery life. Competing radios are usually tested at the request of the sales department of Zenith but occasionally a Zenith radio engineer may initiate the testing of a competing brand of radio. Since the advent of the transistor radio some years ago, Githens has specialized at the Zenith laboratories in the electrical design and development of portable transistor radios and has engaged in the measurement of the service life of batteries used in transistor radios manufactured by Zenith and competing companies.

More than two years prior to the issuance of the complaint in this matter, Githens received for testing two Motorola Model 8x26 transistor radios from Zenith's sales department which were tested between 1958 and 1959 with the results hereinafter shown. These two identical model radios will hereinafter be designated as radios A and B for purposes of convenience. Githens in the regular course of his duties measured the two radios for their current drain and subjected the two sets to "life tests" for the determination of the service life of their batteries. Githens subjected radio A to two life tests and radio B to one life test.

On the basis of the tests made by Githens on radio A (Model 8x26) as reflected in the record, it is determined and found that radio A had a current drain of 20 milliamperes and that on its first "life test" radio A played a total of 132 hours before it stopped due to battery exhaustion and on its second "life test", the set played a total of 81 $\frac{3}{4}$ hours before it stopped due to battery exhaustion but that after 69 hours of the first test and after 71 $\frac{1}{4}$ of the second test, the radio "sounded terrible", that is, the listening quality of the set became unsatisfactory. In the two tests the radio was operated for various periods per day, ranging from an hour and a half to eight hours but more predominantly at cycles of three to four hours per day.

Similarly on the basis of tests made by Githens on radio B (Model 8x26) as reflected in the record, it is determined and found that radio B had a current drain of 19 milliamperes and that on the single "life test" to which it was subjected, the radio was played for a total of 71 $\frac{1}{2}$ hours at which point the sound output of the set deteriorated to such an extent that it was hardly intelligible.

As heretofore shown the only other of the three involved transistor radios on which there is "life test" evidence herein is with respect to Motorola Model L14. It will be recalled that the respondent advertised that the Model L14 "would play 500 hours on low priced batteries." The indicated "life test" on a Model L14 was also made in the Zenith laboratories by Zenith engineers but unlike the life tests on the Motorola Model 8x26 radios which were made long prior to the issuance of the complaint herein, the life test on the L14 was commenced just prior to the hearing of this proceeding at the request of counsel supporting the complaint.

The life test on the L14 radio was made principally by the aforementioned Githens and one George Fyler, who testified in behalf of the Commission with respect to the test procedure and results. Fyler, a Yale University graduate in electrical engineering, has been with Zenith since 1957. He had earlier employment as an electrical engineer with General Electric Company from 1927 to 1946 and by

Motorola from 1946 to 1957. Although his present field of specialization is television, he has had some 40 years of professional experience with radio batteries.

Githens and Fyler commenced a life or performance test on a Model L14 radio on May 4, 1962, equipped with fresh, new Ever-Ready batteries of the type called for in the L14. From measurements made by the two engineers just prior to the commencement of the life test, it is found that the radio had a current drain of 11 milliamperes. Between May 4 and July 15, 1962, the radio was operated in a Zenith laboratory for a total of 263½ hours at the rate of four hours per day except that in the first two weeks of the test the radio was not operated on week-ends. Following the expiration of 263½ hours of operation, the radio on July 16, equipped with the same batteries as it had from the beginning of the test, was brought to the hearing room for a physical demonstration of its playing quality before the examiner and was examined by Motorola engineers at the hearing for defects discernible to the eye with negative results before the demonstrations were started. At the hearing, various demonstrations, as evidenced by verbal descriptions thereof in the record, establish that the radio, following 263½ hours of prior operation, when turned on to its loudest volume could not be heard with intelligibility by persons in the hearing room standing at distances from the radio varying from 4 to 15 feet. Following these demonstrations, the radio was re-equipped with fresh new batteries and again played in the hearing room. With the new batteries, demonstrations, as verbally described in the record, establish that the radio could be heard at medium volumes in all parts of the large hearing room.

In the life test to which the L14 radio was subjected the radio—although played for a total of 263½ hours—had not been operated to the point where the radio would emit no sound whatever. The stipulated end point voltage of the L14 (that is, the point at which the L14 would no longer function satisfactorily) is 2.5 volts (or .41 per cell). Based on this figure and a graph in evidence (CX 103) which shows by a curve the decline of the voltage of the batteries in the L14 radio from their original voltage of 9 volts when new to 3.6 volts at the end of 263½ hours of playing and an imaginary further plotting of the curve to the end point voltage of 2.5 volts, Fyler in his testimony estimated, and the examiner now finds, that the radio would have quit running altogether at the end of about 350 hours of playing on the same batteries.

Summarizing, there has been set forth above the service life of batteries used in Motorola's Models 8x26 and L14 as determined

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under the "Life Test" or performance method of determining battery life.

The record also reflects estimates of the battery service life of Models 8x26 and L14 as well as the L12, as determined under the "Laboratory Data Test" method. For such estimates, counsel supporting the complaint adduced the testimony of Francis J. Wolfe, a battery expert and authority who is and has been associated with the manufacturers of Ever-Ready brand batteries for more than 40 years. He is also secretary of a standing committee of the American Standards Association known as "Committee C-18; Dry Cells and Batteries" which is charged with standardization activities on dry batteries under the sponsorship of the Bureau of Standards, U.S. Department of Commerce.

Relying on pertinent data developed in the Ever-Ready laboratories under the "Laboratory Data Test" method, as such data is summarized in CX 22 and CX 23, Wolfe estimated the battery life of the three involved Motorola radios to be as follows, if played at a low volume of sound, slightly above zero output (sometimes called "0 output" which is hereinafter defined) and barely discernible to the human ear:

Model numbers	Total battery life when played 2 hours per day	Total battery life when played 4 hours per day
8x26.....	88 hours.....	92 hours.
L-14.....	290 hours.....	310 hours.
L-12.....	416 hours.....	465 hours.

CX 22 and CX23, the aforementioned laboratory data sheets on which Mr. Wolfe relied for his above estimates of battery life, are essentially charts on the battery life of batteries designed for use in radios of the kind here involved. The Exhibits show total battery life at various listed rates of current drain discharges,² ranging from ten to twenty milliamperes in multiples of one, to an *end point voltage*³ of .5 volts per battery cell (among other end point voltages not pertinent here). The charts can be used for estimating the life

^{2, 3} For the convenience of the reader, the stipulated definitions of the phrases *current drain* and *end point voltage* are repeated below:

"*Current drain*, expressed in milliamperes, is the measure of current used by a radio (drained from the battery) while it operates, or the rate of flow of electricity from the battery. *End point voltage* is the point at which the voltage in batteries has been so reduced that the (radio) set will no longer function satisfactorily."

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of batteries meant for use in a specified radio set *only* if the current drain and end point voltage measurements of the radio are supplied. In making his aforementioned estimates of battery life on the three involved radios, Mr. Wolfe assumed the measurements for current drain and end point voltage supplied to him at the hearing during his direct examination by counsel supporting the complaint for each of the three radio models.

Respondents accepts the data shown on CX 22 and CX 23 as valid for estimating battery life but the parties are in disagreement as to the proper *current drain* and *end point voltage measurements* to be assumed for the radios in question in the making of such estimates. Of the two measurements, Wolfe testified that the important measurement for him was the current drain measurement. The examiner finds that of the two measurements a radio's current drain measurement has more significance for estimating battery life than the radio's end point voltage.

Wolfe in his estimates of battery life assumed in his testimony on direct examination, pursuant to request of complaint counsel, that each of the three Motorola radios in question had an end point voltage of .5 volts per battery cell. The record, on the other hand, as established by the written stipulation of the parties, show that the end point voltages of Models 8x26, L12, and L14 are .55 volts per cell, .51 volts per cell, and .41 volts per cell, respectively. It is concluded and found that the differences between these figures and the end point voltage of .5 volts per cell used by Wolfe in making his battery life estimates are too small to make any significant differences in estimates of battery life but that in point of fact the .5 volts per cell figure used by Wolfe in his estimates of battery life of Models 8x26 and L12 are more favorable for longer life than the stipulated end point voltages of .55 volts per cell for the 8x26 and .51 volts per cell for the L12. We also note again our earlier finding that a current drain measurement is more significant for estimating battery life than the end point voltage measurement.

For the current drain measurements of the three Motorola radios, Wolfe in his testimony, pursuant to request of complaint counsel, assumed that the Model 8x26 had a current drain of 18 milliamperes at zero output (hereinafter defined), that the Model L12 had a current drain of 10 milliamperes at zero output, and that Model L14 had a current drain of 15 milliamperes at zero output.

The above stated current drain readings, or small variations therefrom, are the readings upon which counsel supporting the complaint rely. The evidence adduced by complaint counsel in proof of these readings is set forth below:

A. *Re Model 8x26*

1. Electrical specifications on the 8x26 issued by respondent, bearing dual dates of September 22, 1958 and November 4, 1959, show its *current drain* at various outputs as follows:

18 MA ⁴ at 0 output	} Average
40 MA at 100 MW ⁵ output	

20 MA at 0 output	} Maximum
58 MA at 100 MW output	

The word "output", shown above, is defined as the volume of sound at which a radio is played. "0 output", shown above and also known as "Zero Output" or "Zero Signal", means that a radio is turned on but at such a low level that no broadcast signals or sounds are coming through the radio. The strength of the sound heard from the speaker of a radio is measured in milliwatts. (These definitions and explanations are also applicable, wherever pertinent, below.)

The record shows that respondent on September 23, 1958 issued a "change notice" (Tr. 26 (c)) on the Model 8x26 radio one day after the original date (September 22, 1958) affixed to the radio's "Electrical Specifications" (CX 16) which contains the current drain measurements shown above. The "change notice" called for a "parts change" involving the substitution of another type of "bias resistor" for the one originally planned. Respondent in its Proposed Findings of Fact contends that the effect of this parts change "was to substantially reduce the radio's current drain from the levels stated on the specifications". The record shows that the "Electrical Specifications" (CX 16) issued on the 8x26 radio was again reissued more than a year later, on November 4, 1959, without any change in the current drain measurements shown in the specifications as of the date of its original issuance on September 22, 1958. It is found that the "parts change" of September 23, 1958, would not have the effect of requiring any changes in respondent's posted current drain measurements of the Model 8x26 as shown in Motorola's "Electrical Specifications" for the radio as set forth above.

2. A *Motorola Service Manual* issued by respondent on Model 8x26 in November 1958 shows its "Battery Drain" to be "18 ma (max)—with no input". Rephrasing the above to the phraseology heretofore used, it is found that the service manual states that Model 8x26 has an *average maximum current drain* of 18 MA at 0 output.

3. Tests conducted on two Model 8x26 radio sets in 1958 and 1959 by the aforementioned Zenith radio engineer Githens showed that

⁴ "MA", by the stipulation of the parties, is the abbreviation for the word "milliamperes" and shall so be considered wherever it appears herein.

⁵ "MW" is the abbreviation for the word "milliwatts" and shall so be considered wherever it appears herein.

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one set had a *current drain* reading of 20 milliamperes and the other, a reading of 19 milliamperes. It is found that these single readings for each of the two radios were taken when the radios were played at low volumes. This finding is based both on the testimony of Githens (Tr. 391-392) and the record as a whole which shows that when radio engineers quote a single current drain figure for a radio they generally mean to indicate the current drain of the radio at a low volume of playing. (The above finding that a current drain measurement will be taken to mean a reading at low volume where only one such measurement is noted for a radio, will also be applicable, wherever pertinent, below.)

4. A test made in June 1959 by the Electronics Division of Consumers Union of U.S., publishers of *Consumer Reports*, on a single set of the Model 8x26 radio showed the set to have a current drain measurement of 20 milliamperes when played at a volume considered loud enough to overcome noise which would exist on the street or on a picnic ground. Official notice is taken, and a number of respondent's advertisements show, that portable transistor radios are used and intended to be used to a large extent on the street or at such public places as a beach. From the testimony of Karl H. Nagel, chief of the aforementioned Division of Consumers Union and an electrical engineer of vast experience in the field of testing radio and television sets for the consuming public, it is found that the testing of a single radio for its current drain measurement is normally sufficient to establish the current drain reading for all radios of the same model as experience has shown that significant variations in current drain measurements among radio sets of the same model are not very likely. Consumers Union, a nonprofit organization, functions "to provide for consumers information and counsel relating to consumer goods and services". Its monthly magazine, *Consumer Reports*, which provides such consumer information with respect to specific competing branded merchandise, is well known to much of the consumer public. Its mode of operation is to buy competing consumer merchandise anonymously on the open market, to subject such merchandise to comparative tests, and to publish the results of the tests in *Consumer Reports*.

B. *Re Model L12*

1. Electrical specifications on the L12 issued by respondent on April 4, 1959, show its *current drain* measurements at various outputs as follows:

10 MA at 0 output	} Average
25 MA at 50 MW output	
12 MA at 0 output	} Maximum
32 MA at 50 MW output	

2. A *Motorola Service Manual* issued by respondent on the L12 in April 1959 shows its "Battery Drain" to be "10-12 ma (max) with no input signal." Rephrasing the above to the phraseology heretofore used, it is found that the service manual states that the L12 has an *average current drain* of 10 MA at 0 output and an *average maximum current drain* of 12 MA at 0 output.

3. A test made in April 1959 by a Zenith electrical engineer, Dwight J. Poppy, on a L12 model radio showed the radio to have a *current drain* measurement of 16 milliamperes at zero signal. The test was made by Poppy in the regular course of his routine duty to make measurements of the electrical characteristics of transistor portable radios manufactured by his employer Zenith and competing radio manufacturers and as part of his job as a design engineer in the field of transistor radios.

C. *Re Model L14*

1. Electrical specifications on the L14 issued by respondent on April 15, 1959 shows its current drain measurements at various outputs as follows:

15 MA at 0 output	} Average
56 MA at 300 MW output	
18 MA at 0 output	} Maximum
60 MA at 300 MW output	

2. A stipulation by the parties that the L14's current drain specifications are as in the measurement figures shown above.⁶ (Stip., par. 62) (The parties have not entered into similar stipulations with reference to the Models 8x26 and L12.)

3. A "life test" on an L14 radio for a period of 263½ hours in conjunction with a projection of the curve established by such operation for 263½ hours establishes a maximum battery life of about 350 hours for the L14 radio. (See findings above based on testimony of Zenith's engineer Fyler.)

Recapitulating, there has been set forth above findings of fact showing two sets of estimates of battery service life under evidence

⁶ The record also contains a *Motorola Service Manual* on the L14 (CX 21 A-B) which shows lower current drain measurements for the L14 than that reflected in the aforementioned stipulation of the parties. Although cognizance has been taken of the Motorola service manuals on the Models 8x26 and L12 in the Findings of Fact above as such manuals relate to the current drain specifications for these two models, no cognizance is taken in the Findings of Fact herein of the current drain measurements shown in the *Motorola Service Manual* on the L14 (1) because the L14 Manual measurements for current drains are in variance with the measurements the parties have agreed to by stipulation as shown above, (2) because the L14 Manual predates the Motorola L14 Specifications, and (3) because respondent has not requested any findings of fact based upon the L14 Manual.

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adduced by counsel supporting the complaint. The first set of estimates, embracing only Motorola's Models 8x26 and L14 radios, was determined under the performance or "life test" method of determining battery life. The second set of battery life estimates, which embraces estimates for each of the three involved Motorola radio models, was determined under the "Laboratory Data Test" method under certain assumed current drain measurements as shown above. The evidence supporting such "assumed current drain measurements" has also been set forth above.

Respondent, in support of its defense that the longevity representations it has made with respect to battery life in the three involved Motorola radios are true and not false, misleading, and deceptive as alleged in the complaint, has not presented any evidence under the "life test" method on the battery life of the three radios but relies exclusively on evidence it has adduced on battery life in the three radios under the "Laboratory Data Test" method. This evidence stems from the expert testimony of respondent's battery expert, Joseph Vanko, who also as in the case of Wolfe, complaint counsel's expert witness, based his estimates of battery life on "assumed current drain measurements" for each of the three Motorola radios. The current drain measurements assumed by Vanko in making his estimates of battery life for the three Motorola radios were those supplied by the testimony of Richard J. Harasek, an electrical engineer in the employment of respondent, with some adjustments hereinafter described.

Starting first with the current drain measurements assumed by Vanko as derived from the testimony of Harasek, the background for such measurements is as follows. Harasek, a long time employee of respondent and its senior project engineer in charge of the design and development of Motorola portable transistor radios, caused an examination to be made in May 1962 of samples of the three involved Motorola radio models for their current drain measurements. These measurements were taken in anticipation of the hearing herein and for use as evidence at the hearing. Respondent does not have any earlier records of drain measurements on the three radio models, such as measurements made prior to or at the time the radios were first marketed in 1959 or at the times they were advertised for their alleged battery life longevity.

Harasek selected from inventory some six to eight radios of each of the three models, each group having been manufactured on or about the same day, and caused them to be carefully measured for

their current drains. The radios thus measured showed average current drains as follows:

<i>Model No.</i>	<i>Average Current Drain at 0 output</i>
8x26-----	9.7 M.A.
L12-----	8.4 M.A.
L14-----	11.08 M.A.

Seeking support for Harasek's above current drain measurements, respondent employed Dr. Thomas Butler, an associate professor of electrical engineering at the University of Michigan, to make independent measurements of one radio of his own selection from each of the foregoing described groups of radios for current drains. Dr. Butler's measurements as established by his testimony in behalf of respondent showed current drains as follows:

<i>Model No.</i>	<i>Average Current Drain at 0 Output</i>
8x26-----	8 M.A.
L12-----	7.9 M.A.
L14-----	10 M.A.

Respondent's aforementioned witness Vanko, engineer manager of battery applications for Ray-O-Vac Company, relying on certain assumptions he was requested to make by counsel for respondent, estimated the battery life of the three model radios under the "Laboratory Data Test" method of assaying battery life as follows:

<i>Model No.</i>	<i>Total Battery Life</i>
8x26-----	250 to 260 hours
L12-----	545 to 580 hours
L14-----	510 to 550 hours

In making the above battery life estimates under the "Laboratory Data Test" method, Vanko made the following assumptions pursuant to request of counsel for respondent. He assumed for each of the three models (1) the appropriate Harasek current drain measurement (as shown above) with slight upward revision, (2) the appropriate stipulated end point voltage, and (3) that the radio is played at a volume sufficient to be heard in a room within three or four feet of the listener which is at a significantly higher volume than that assumed by complaint counsel's battery expert Wolfe in his estimates.

With respect to the volume of sound at which the involved radios would normally be played, it is found that respondent advertised its radios for outdoor use and that a transistor radio used outdoors has to be played at a louder volume than that involved in playing a radio indoors for comparable listening, with a consequent greater drain of electricity from the battery.

The record as a whole shows that the advertised battery life representations here involved were made without any requirement for

prior substantiation or prior clearance on the truthfulness of said representations by responsible engineering personnel of respondent. From the record as a whole, it is further found that at the time that the advertisements in question were run respondent did not have in operation any plan or system which required advance clearance on proposed advertisement claims before they would be authorized for publication (Tr. 1730, 1751, and 3000).

SUMMARY OF CONFLICTING BATTERY LIFE ESTIMATES

Summarizing the advertised battery life on each of the involved radios and the conflicting expert testimony as to the estimated battery life of each and placing these conflicting estimates in juxtaposition, the indicated matter appears as follows:

AS ADDUCED BY COMPLAINT COUNSEL

Model No.	Advertised life	"Life Test" battery life	"Laboratory Data Test" battery life
8x26-----	"Hundreds of hours at peak performance on low priced batteries"	72 to 132 hrs-----	88 to 92 hrs.
L12-----	"500 hours on low priced batteries"	Not given test----	416 to 465 hrs.
L14-----	"500 hours on low priced batteries"	350 hrs ⁷ -----	290 to 310 hrs.

⁷ Although the radio required 350 hours for complete exhaustion, it became unintelligible after 263½ hours of use.

AS ADDUCED BY RESPONDENT'S COUNSEL

Model No.	Advertised life	"Life Test" battery life	"Laboratory Data Test" battery life
8x26-----	Same as above-----	Not given test----	250 to 260 hrs.
L12-----	Same as above-----	Not given test----	545 to 580 hrs.
L14-----	Same as above-----	Not given test----	510 to 550 hrs.

DISCUSSION AND CONCLUSIONS

It is our conclusion that respondent's representation that "Its Model 8x26 radio * * * will play hundreds of hours at peak performance" is a false, misleading and deceptive representation, even under the most optimistic estimate contained in the record on that model's service battery life, namely, the estimate of respondent's battery expert, Vanko, that the radio would have a battery life of between

250 to 260 hours. It is not here necessary to define precisely the minimum multiple of "hundreds" of hours a radio must play on a set of batteries to fulfill a claim of "hundreds of hours" of playing time. It is sufficient to point out that in common parlance a radio which will play only a maximum of 260 hours is not one which plays "hundreds of hours at peak performance." It is also obvious that a radio whose batteries have reached the exhaustion point after 260 hours of operation has not been playing at "peak performance" for many hours before it played out at 260 hours. But for reasons which will appear below, Vanko's battery service life estimate of between 250 to 260 hours on the Model 8x26 is rejected in any event as being excessive. To complete the full developments of the facts about the 8x26, it is found by reason of the results of "life tests" or actual performance tests administered to that model radio that it would have a maximum battery life of 132 hours but would become unintelligible long before it had been played that many hours.

A more marked conflict of opinion as to battery life exists on respondent's Models L12 and L14 than on the 8x26 but the conflict of opinion on all three radios is due primarily to the fact that the battery experts for the two opposing parties assumed different current drain measurements for each of the three radios in making their respective battery life estimates. The evidence shows, if evidence is necessary for the obvious, that a radio which uses a large amount of current drain will have a shorter battery life than one which uses a smaller current drain. Complaint counsels' battery expert, Wolfe, in making his estimate, assumed the current drain measurements reflected in respondent's electrical specifications for each of the three radios. On the other hand, respondent's battery expert, Vanko, in making his estimate, assumed the much lower current drain figures supplied by respondent's chief project engineer, Harasek, as a result of measurements made under his supervision in 1962 shortly prior to the hearing herein and for the purpose of the hearing. This conflict of assumptions as to the measurements of current drain on each of the three radio models is hereby resolved in favor of the higher current drain measurements assumed by complaint counsels' expert witness, Wolfe, from respondent's own electrical specifications. Accordingly, the examiner finds and concludes that the true and correct current drain measurements of the three radios are those reflected in respondent's electrical specifications.

The above findings have been made because the current drain measurements contained in respondent's electrical specifications are deemed superior from a credibility standpoint to those now urged upon the examiner by respondent. Stated generally, the former are

entitled to greater credibility because they were in force and effect as official company instructions for the manufacture of the involved radios at the time the radios were being manufactured and at the time the advertisements in question with respect to their alleged battery life were being published and also because the current drain measurements contained in respondent's electrical specifications were also found with minor variations by qualified, disinterested persons through appropriate tests at the time the radios were being marketed by respondent, except that in the case of the L14 radio the corroboration was made in 1962. As shown under our "Findings of Fact," the latter included independent tests of the current drain measurements of the three radios by the engineering departments of Consumers Union and Zenith. The tests for current drain made by the Zenith engineers, except for the measurements on the L14 made at the request of complaint counsel, were made as part of their routine duties to check competing radios sent to them by Zenith's sales department. The described contemporaneous evidence of the current drains of the three radios from sources both inside and outside of respondent's organization dating back to the time when the present litigation was not even in sight is deemed and found far more persuasive and creditable than the current drain measurements taken by respondent in 1962 (after it had stopped the manufacture of the said models) in preparation for the hearing herein.

Disposition having been made in favor of the current drain measurements shown in respondent's electrical specifications, it follows and is found that Mr. Wolfe's battery life estimates on the three radios under the "Laboratory Data Test" method of determining battery life which are based on the current drain measurements found in the electrical specifications are true and correct and that Mr. Vanko's battery life estimates on the three model radios are not true and correct since they are based on less creditable current drain measurements. The further findings and discussion below will pertain to the Models L12 and L14 as the ultimate findings and discussion on the Model 8x26 was covered above, except that it should be noted that Mr. Wolfe's battery life estimate of 88 to 92 hours on Model 8x26 is accepted as the true and correct estimate of the battery life of the radio under the "Laboratory Data Test" method of determining battery life as against Mr. Vanko's estimate of 250 to 260 hours under the same method for assaying battery life. Mr. Vanko's estimate of 250 to 260 hours was cited above merely to show that even under that estimate respondent's Model 8x26 will not play "hundreds of hours at peak performance."

Based on Mr. Wolfe's testimony, it is found that the L12 radio (which unlike the other two radios was not subject to a "life test")

would have a maximum battery life of 465 hours. Since respondent advertised that the L12 would play "500 hours on low price batteries", it is found that such representation is false, misleading and deceptive. Mr. Wolfe's estimate of a maximum battery life of 465 hours on the L12 is not as close to the advertised life of 500 hours as might seem at first sight. This is because Mr. Wolfe's estimate was based on a playing of the L12 at slightly above zero output, that is, at a volume which is barely discernible to the human ear. It is evident that if the radio were played at a volume of sound comfortable to the ear that it would use more current and consequently the batteries in the radio would become exhausted long before 465 hours of playing and would become unintelligible to the human ear long before its exhaustion point.

Similarly based on Mr. Wolfe's testimony, it is found that the L14 radio would have a maximum battery life of 310 hours under the "Laboratory Data Test" method of determining battery life. It will be recalled that Zenith's engineer Fyler operated a L14 radio under a "life test" for a period of 263½ hours before he brought it to the hearing room for a demonstration of its then playing ability. In the hearing room under demonstration after 263½ hours of prior playing, the radio still functioned but was unintelligible to the human ear and the record through the testimony of Fyler shows that by an imaginary projection of the plotted curve in evidence the radio would continue to emit sound, albeit unintelligibly, until it had been played a total of about 350 hours when it would become "dead" altogether. It thus appears that Fyler's projection was on the generous side. Since respondent advertised that the L14 would play "500 hours on low priced batteries" and the facts show it would play a maximum of between 310 and 350 hours, it is found that such representation is false, misleading and deceptive.

2. "Selectivity" Issue

The complaint charges that respondent has falsely represented that:

Its Model 8x26 radio set had 9 times more capability than other sets to select a desired radio station.

The representation shown above was made through advertisements of the Model 8x26 by respondent which read as follows:

- (a) * * * has 9 times more power to select desired stations. reject unwanted stations * * *.
- (b) * * * 9 times more power to reject unwanted stations * * *.

Respondent admits that the above advertisements "constitute claims of superior 'selectivity' for respondent's 8x26 radio", but

denies that such claim of "superior selectivity, *as understood by the purchasing public*, is false." (Emphasis as supplied in respondent's proposed findings of fact, p. 28.)

It contends that counsel supporting the complaint has "utterly failed to prove that '9 times more selectivity' has an established meaning to the purchasing public, and that within such meaning respondent's claim is false." Amplifying its contention, respondent argues that the "falsity of advertising claims must be established *as they are understood by the average consumer*." (Respondent's proposed findings of fact, pp. 33-34.)

The initial question is thus, what do the involved ads mean to the lay purchasing public. It has long been settled that the meaning of an advertisement to the purchasing public can be determined from the advertisement itself and other relevant evidence in the record which aids in interpreting the advertisement, and that sample public opinion is not required for the interpretation. *Zenith Radio Corp. v. Federal Trade Commission*, 143 F. 2d 29 (7th Cir. 1944). From such consideration of the advertisements in question, it is found that *the purchasing public would understand* the advertisements as conveying a representation that respondent's Model 8x26 radio set has a *capability* to select and hold stations and to reject unwanted stations *nine times greater than that of any other radio set*. This finding is corroborated by the parties' own stipulated definition of "selectivity", to-wit, that characteristic of a radio which determines "the extent the radio is *capable* of providing the desired station without interference from other stations." (Emphasis supplied.)

From the above it follows and is found that respondent's above-shown advertisements constitute, as alleged in the complaint, a representation that "Its Model 8x26 radio set had 9 times more capacity than other sets to select a desired radio station."

The next or final question is whether the above representation is false, misleading and deceptive as alleged in the complaint. This inquiry will necessarily involve to some extent technical matter as the question of whether one radio has a better selectivity than other radios is an engineering question which must be resolved by expert testimony, that is, the testimony of electrical engineers who are skilled in making and interpreting selectivity measurements. The expert evidence on this is, as it is on all other issues herein, conflicting.

We have stated above one of the parties' stipulated definitions of the term "selectivity". The complete definition of the term, as agreed upon by the parties in their Stipulation of Fact, is as follows: "*Selectivity*. The characteristic of a radio that determines the extent

to which it is capable of selecting the signal on the frequency to which the radio is tuned and rejecting signals on other frequencies or, in other words, the extent the radio is capable of providing the desired station without interference from other stations. The degree of interference provided by the unwanted station will vary with both the signal strength of the interfering station and proximity of the interfering station to the desired station on the radio dial."

The background facts for an understanding of selectivity measurements are these. Every AM broadcast radio receiving set has a "Broadcast Band". A broadcast band is that band of frequencies⁸ in the spectrum between 550 kilocycles and 1600 kilocycles which are assigned all standard (AM) broadcasting stations operating within the United States, the assignments having been made by the Federal Communications Commission. The listener turns the radio on to the desired frequency or station on the broadcast band which may be on a channel anywhere between 550 and 1600 kilocycles and he will, of course, want that station to come through without interference from any other station on the broadcast band but as a practical matter the interference, if any, will come only from stations (frequencies) located on the band adjacent or close to the desired station, just as two airplanes traveling in the air within 100 feet of each other are more likely to collide than if they were 5000 feet apart.

In any given geographical area the Federal Communications Commission will assign channels to stations therein sufficiently far apart on the broadcast band to prevent interference with each other on a local listener's radio receiving set tuned to local radio stations. But the Federal Communications Commission has assigned the same or adjacent channels or frequencies to two or more stations located in different geographical areas because ordinarily these will not interfere with each other for the average urban listener who listens only to stations in his own geographical area. However, there are many listeners who reside in homes located in areas somewhere in between geographically separated stations which are adjacent to each other on the broadcast band. It is in such situations that the selectivity of a radio becomes important but selectivity is also especially important for portable transistor radios such as here under consideration because such radios are frequently used on trips away from the home.

Among radio engineers, selectivity is regarded as one of the three primaries in the design of a radio receiver set, the other two being sensitivity and fidelity.

⁸ "Frequencies" are units of electrical wave bands. The singular of the term, or "frequency", is defined as the number of vibrations or cycles per second.

The selectivity or ability of a radio to hold a station and to reject unwanted stations on channels adjacent to the desired station can be measured from any frequency in the broadcast band as the reference point but if only one such reference point is used, as is usually the case in normal selectivity testing procedure, it is taken from approximately the center of the broadcast band, that is, from the 1000 kilocycle frequency point thereon, because the selectivity at that central point on the band is fairly representative of the selectivity of all other frequency points on the band.

The record shows, and the parties are agreed, that there is a standard method or procedure for measuring the selectivity of a radio receiving set, which involves the use of a signal generator. This is an instrument used to produce radio frequency signals having known frequency values and a means of determining its power output⁹ at any radio frequency. In accordance with such standard procedures, all selectivity tests of record in this proceeding use the aforementioned 1000 kilocycles as the reference frequency. This is accomplished in the following manner: The receiver is tuned to 1000 kilocycles and the signal generator is also tuned to this frequency. The voltage control on the signal generator is adjusted so that some arbitrary voltage (usually 50 millivolts) is derived from the audio output,¹⁰ and the signal generator output voltage¹¹ is noted. The signal generator is then tuned to 990 kilocycles and its output voltage¹² increased until the meter in the audio output¹³ again reads 50 millivolts, and the signal generator output voltage¹⁴ again noted. This procedure is repeated for frequencies both above and below 1000 kilocycles. The data so obtained can be plotted and results in a selectivity curve of the type shown in Exhibit No. 64. It is to be noted that the higher the signal generator output voltage at frequencies removed from the reference 1000 kilocycles required to maintain the same audio output as at 1000 kilocycles, the better the receiver selectivity. *Put another way and one easier to follow in connection with the selectivity test measurements for the Model 8x26 radio set shown below, it should be noted that the smaller the frequency distance from the 1000 kilocycle reference frequency with an increase of signal generator power output, the more selective the receiver.*

⁹ "Power output" is a radio frequency voltage, or pressure, expressed in terms of volts as decimal parts of a volt.

¹⁰ "Audio output" is normally apparent as sound, but is also measurable as voltage through use of a suitable meter. The louder the sound, the higher the voltage, and vice-versa. See also similar definition of "audio output" in Stipulation of Facts, paragraph 35.

¹¹ Same as footnote 9.

¹² Same as footnote 9.

¹³ Same as footnote 10.

¹⁴ Same as footnote 9.

Thus a typical selectivity measurement as determined by a radio engineer might read:

$$\frac{\frac{2X}{7 \text{ KC}}}{1000 \text{ KC}} = \frac{1000X}{59 \text{ KC}}$$

Translated so that lay readers may better understand the above, this would be revised to read: At a signal generator power output of twice (*i.e.* 2X) that used to establish the reference level at 1000 kilocycles, the frequencies at which the same receiver power output were obtained were 993 and 1007 kilocycles, respectively, and at a signal generator power output of one thousand times (*i.e.* 1000X) that used to establish the reference level at 1000 kilocycles the frequencies at which the same receiver power output were obtained were 941 and 1059 kilocycles, respectively. *Thus, for example, a frequency distance of 5 kilocycles at a two times (expressed above as 2X) power increase would indicate a more selective receiver than one whose frequency distance was 7 kilocycles at two times (2X) power increase. Similarly, a frequency distance at 49 kilocycles at 1000 times (expressed above as 1000X) the power increase would indicate more selectivity than a distance of 59 kilocycles at 1000 times (1000X) power increase.*

Counsel supporting the complaint relies on selectivity measurements made by Zenith engineers, in accordance with the above described standard procedure for measuring selectivity, on Motorola's Model 8x26 and two competing Zenith brand transistor radios known as Zenith Royal 500 and Zenith Royal 700 to establish its contention that the Model 8x26 does not have "9 times more capacity than any other sets to select a desired radio station". The Zenith tests here referred to were approximately contemporaneous with the marketing of the Model 8x26.

It is found that the selectivity test measurements made on the aforementioned model radios in accordance with standard procedures by Zenith radio engineers were made in the regular course of business by competent engineers for internal use by Zenith management in maintaining quality standards for its own products and without any idea that it would be used in litigation. It is further found that the radios so tested for their selectivity were representative of all radios of the same models and that the selectivity test measurements so made of such radios were representative of all nondefective, regular production radios of the same models. It is specifically found that the Zenith Royal 500 and 700 radios, whose selectivity measurements are shown below, were representative of all nondefective, production runs of the same model radios, although the particular radios of these models under test were taken from "production's trial runs on the

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model". From the testimony received from Zenith's radio engineer Theodore Githens, who as shown above is supervisor of a group of Zenith engineers engaged in work on portable transistor radios, it is found that the selectivity measurements shown below, as reflected on Zenith test reports now in evidence as exhibits, are true and correct.

The aforementioned selectivity tests by Zenith engineers on the Motorola 8x26 transistor radio and two competing Zenith transistor model radios resulted in the following selectivity measurements:

Model	Date of test	1000KC	
		2X	1000X
Zenith Royal 500.....	1/31/57	7 KC	47.5 KC
Zenith Royal 700.....	12/12/57	5 KC	58.0 KC
Motorola 8x26.....	12/ 8/58	7 KC	59.0 KC

(See pages 86 and 87 above for lay explanations of these engineering selectivity readings. It will be remembered that the smaller the figure under the 2X and 1000X attenuations, the better the selectivity.)

Based on the above measurements, it is found that the Zenith Royal 500 transistor model radio which was on the market prior to the Motorola 8x26 had a superior selectivity to that of the 8x26. For all practical purposes, it is found that the selectivity of the Zenith Royal 700 is about equal to that of the Motorola 8x26. The accuracy of the above shown Zenith laboratory selectivity measurements of the Motorola 8x26 is largely corroborated by respondent's own selectivity specifications for the Motorola 8x26 which read as follows:

1000KC	
$\frac{2X}{5 \text{ KC (av.)}}$	$\frac{1000X}{58 \text{ KC (av.)}}$

Further evidence from the files of respondent gives additional substantiation to the accuracy of the Zenith engineers' selectivity measurements on the Motorola 8x26 and the Zenith Royal 500, as set forth above, and our conclusions therefrom that the Royal 500 had the superior selectivity. In the early part of 1960, or about two years prior to the issuance of the complaint herein, Motorola engineers made selectivity measurements on the 8x26 (and also on Motorola's Model 7x25 not here pertinent) and plotted a selectivity curve pursuant to such measurements on a piece of graph paper. That document is now in evidence as CX 64. Two years later in May 1962, respondent caused their engineers to make comparative selectivity measurements of the 8x26 and the Zenith Royal 500 which purport

to show that the 8x26 has superior selectivity. The latter measurements are in evidence as RX 22A. The testimony herein from the experts for both parties conclusively establishes that if the selectivity measurements of two years ago shown on the said CX 64 for the 8x26 is compared with the selectivity measurements of 1962 shown on the said RX 22A for the Royal 500, the Royal 500 shows up as having the superior selectivity. This again affirms the accuracy of the aforementioned Zenith selectivity measurements on the Motorola 8x26 and the competing Zenith Royal 500 and offers additional verification for the conclusion drawn therefrom that the Royal 500 has the superior selectivity.

The counter evidence adduced by respondent in support of its contention that the Motorola 8x26 radio had a "9 times" superior selectivity over the Zenith Royal 500 is rejected. This contention is based on comparative selectivity tests made in 1962 by respondent's radio engineers on the 8x26 and a Zenith Royal 500 radio upon which respondent relies to show that the 8x26 had superior selectivity over the Royal 500 on a "power" basis of comparison. The results of these tests are shown in the aforementioned RX 22A. The contention is rejected for a number of reasons. The tests were made two years after the respondent had stopped the manufacture of the 8x26 and were performed in preparation for the hearing herein. It is found that the Model 8x26 radios selected for testing at such late date cannot be accepted as being as representative of the same model radios as those which were tested by the Zenith radio engineers at the time the 8x26 was actually being manufactured, advertised and marketed. Similarly it is found that the selectivity measurements obtained in such tests by Motorola engineering personnel with the advance knowledge that they were to be used as evidence in defense of the charges here under consideration are not as creditable as those taken by Zenith engineers on the same model radio, when it was still being manufactured, in the regular course of duty in connection with keeping their employer informed about the quality of competing radios and maintaining quality standards for their employer and without any thought of their possible use in future litigation.

Another reason for rejecting respondent's exhibit RX 22 is that through it respondent seeks to show that its Model 8x26 has "9 times" the selectivity of the Zenith Royal 500. The evidence is conclusive that such attempts to express selectivity superiority in terms of a single, simple multiplication figure are unscientific and unrealistic and accordingly must be rejected. Mr. Willmar K. Roberts, Assistant Chief of the Laboratory Division of the Federal Communications Commission, testifying in behalf of the Government, stated the fol-

lowing in this connection: “* * * two dimensions, the width and height, are both wrapped up in selectivity but because there are two dimensions it is not simply possible for an engineer to come to a simple, single number by which he can say that one radio is so many times more selective than the other.” (Tr. 1119.)

Similarly, the aforementioned Dr. Butler, Associate Professor of Electrical Engineering of the University of Michigan testifying in behalf of respondent on the same matter, testified under cross-examination as follows:

Mr. Dunn, complaint counsel:

Q. It is true, isn't it, that in comparing the selectivity of two radios, you prefer to make use of selectivity curves for the two radios?

A. Yes, I do.

Q. Isn't this because selectivity has at least two dimensions [width and height] and you cannot characterize the selectivity of a radio by any single number, such as nine, or fifty, or any other number?

A. That is true.

Q. Isn't it true that organizations of radio engineers have not adopted standardized methods of evaluating or comparing the selectivity of radios in terms of single numbers or single ratios?

A. That is true.* * *. (Tr. 2156-2157.)

* * * * *

Q. Doctor Butler, I ask you to suppose that a radio engineer were to write you a letter, and in that letter to tell you that a certain radio is nine times more selective than another radio. As a radio expert, isn't it true that you would not have a complete understanding of what he meant?

A. That is true. (Tr. 2152.)

Finally, to allude to a matter heretofore referred to in a positive or affirmative sense (see first full paragraph on page 27) and here in a negative sense, RX 22A is rejected because the 1962 measurements reflected therein for the Zenith Royal 500 when compared with the 1960 Motorola measurements for the 8x26 in CX 64—rather than with the 1962 Motorola measurements on the 8x26 also shown in RX 22A—show that the Zenith Royal 500 has the superior selectivity. This is admitted by respondent's expert witnesses. It is thus evident that respondent's 1962 measurements of the Royal 500 when compared with respondent's own measurements of the 8x26 in 1960 when it was still being manufactured and there was no thought of the present litigation, establishes the superiority of the Royal 500's selectivity.

Respondent's only basis for its advertised claims that its 8x26 radio had “9 times” better selectivity than other radios was a comparative selectivity test it made in 1960 on its 8x26 radio and an earlier Motorola model radio known as the 7x25 which latter model is not in issue herein. This comparison was made because respondent's

engineers believed that their incorporation of a tuned RF stage (see definition in Stipulation of Facts, par. 32) in the design of the 8x26 would give it a better selectivity than the 7x25 which like many other radios of that time did not have a tuned RF stage. The results of this comparison reflected in the aforementioned CX 64 showed the 8x26 to have the superior selectivity but respondent made no comparative tests of the 8x26 with any other competing brand transistor radios, like the Zenith Royal 500, either before or during the time it advertised that its 8x26 had "9 times" greater selectivity than other sets in order to substantiate such claim. It is found that the comparison of the selectivity of the 8x26 with that of the 7x25 did not furnish a proper basis for the representation here under consideration.

In summary, Respondent's Exhibit 22A, purporting to show that the Motorola 8x26 model transistor radio has a "9 times" better selectivity than the Zenith Royal 500 transistor radio is rejected as being without probative value. This is not to say that the 8x26 does not have "good" selectivity; the record shows that it has but that is not the issue here. The issue is whether the 8x26 has "9 times more capability than other sets to select a desired station".

CONCLUSION

For reasons that appear from the above, it is our conclusion that respondent's representation that its Model 8x26 radio set had "9 times" more capability than other sets to select a desired radio station is false, misleading and deceptive.

3. *"Like 10 Tube Radio" Issue*

The complaint charges that respondent has falsely represented that:

Its Model 8x26 radio set was comparable in power output to a 10 tube radio.

The above charge is based on an excerpt from an advertisement by respondent of which the following is typical:

Like carrying a full 10-tube radio in your pocket! This pint-size power-plant packs 8 transistors and 2 germanium diodes. (Underscored shown as it appears in ad.)

Respondent in its proposed findings of fact contends that the above excerpt is not fairly representative of the full ad because it omits the following sentence from the original text of the advertisement: "5 times more power to get more stations." It states that the excerpt plus the omitted sentence must be considered as the "full, complete and typical statement of respondent's claim" or representation with respect to the Model 8x26.

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Respondent then denies that the excerpt when considered with the omitted sentence constitutes a representation as charged in the complaint that "Its Model 8x26 radio set was comparable in power output to a 10-tube radio". Indeed, respondent in its proposed findings of fact flatly "denies that it made any such claim". The key words in the charge are "power output". Respondent argues that the ad itself does not claim superior "power output" for the Model 8x26 radio set but only superior "sensitivity" which it contends (see respondent's reply brief at page 5) is not in issue under the pleadings of this proceeding because "there is no charge in the complaint relating to the sensitivity capabilities of the 8x26 radio".¹⁵ Respondent notwithstanding its argument that the radio's "sensitivity" is not in issue under the pleadings nevertheless saw fit to introduce under the "power output" charge here under consideration evidence relating to the "sensitivity" of its Model 8x26 radio designed to show that the radio had a sensitivity comparable to a 10 tube radio.

Counsel supporting the complaint, on the other hand, contend that the indicated omitted sentence from the excerpt of the ad set forth in the complaint is not the only omission and that the full ad as of record, particularly with the also omitted sentence reading "Audio transformer delivers 30% more audible volume without distortion", spells out a representation, as charged in the complaint, that the Model 8x26 radio was comparable in "power output" to a 10-tube radio. Proceeding on this interpretation of the ad and relying on certain stipulations of fact to establish the charge of the complaint under consideration, complaint counsel submitted its case-in-chief on such basis.¹⁶ Nevertheless, to counter the evidence offered by respondent to show that the 8x26 radio had a "sensitivity" comparable to a 10-tube radio, complaint counsel introduced rebuttal evidence designed to show the contrary.

Thus we are met at the outset with the necessity of determining what the ad really says or represents to the purchasing public. The examiner agrees with counsel for both parties that the nature of the ad's representations must be determined from its full text and not merely from the excerpt therefrom shown in the complaint. The full ad reads as follows:

¹⁵ Along the same line is the following statement in respondent's proposed findings of fact, page 39: "Although, of course, there is no issue in this case that respondent's 8x26 radio does not have *sensitivity* comparable to a 10-tube radio, RX 25 reports sensitivity measurements of the 8x26 radio and tube radios and shows them to be comparable. (R. 1646.) (Underscoring is respondent's.)"

¹⁶ See complaint counsel's Proposed Findings of Fact at page 21.

POCKET FULL OF POWER

Like carrying a full 10-tube radio in your pocket! This pint-size power plant packs 8 transistors and 2 germanium diodes. Extra amplifier transistor in RF stage produces 5 times more power to get more stations. 3-section gang Tuning Condenser has 9 times more power to select desired stations, reject unwanted stations. Audio transformer delivers 30% more audible volume without distortion. Plays hundreds of hours at peak performance. (Under-scoring shown as it appears in ad.)

As heretofore indicated under the battery life issue above, it is now firmly established that the Commission and its duly appointed hearing examiners are "not required to sample public opinion to determine what the petitioner [respondent] was representing to the public". Appropriate officials of the Commission have "a right to look at the advertisements in question, consider the relevant evidence in the record that would aid * * * in interpreting the advertisements, and then decide * * * whether the practices engaged in by the petitioner were unfair or deceptive, as charged in the complaint". *Zenith Radio Corp. v. Federal Trade Commission, supra.*

The examiner has carefully examined the full advertisement shown above and the variations thereof which appear in the record. Based on such examination and study, it is found that the advertisements in question constitute representations that the Model 8x26 radio is capable of bringing in (a) weak stations comparable to that of a 10-tube radio at a (b) volume or degree of loudness comparable to that of a 10-tube radio station. The first of these representations relates to the radio's "sensitivity" which is not directly involved under the charge at issue, namely, that the 8x26 has a "power output" comparable to that of a 10-tube radio. The second representation is definitely related to the "power output" charge of the complaint as will be seen below.

It is our finding that the average potential consumer will get an immediate impression from the heading of the above-noted advertisement which reads "Pocket Full of Power" and its opening sentence "Like carrying a full 10-tube radio in your pocket!" This impression, one very endearing to the heart of nearly every prospective small radio purchaser, will be that of a promise or representation that with a small transistor radio, the Motorola 8x26, he will be able to bring in (a) in volume (b) weak or distant stations comparable to that of a 10-tube radio. To the average radio user, the term "weak station" means "distant station"; the two terms are synonymous in his mind. Whether right or wrong from a technical point of view, in the public mind the ability of a radio to bring in (a) weak or distant stations (b) *in volume* is associated with the number

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of tubes a tube radio has and a radio having 10 tubes is generally regarded as a "powerful" radio in these respects. This is, of course, why respondent in its advertisements compare the 8x26 to a 10-tube radio.

For the more careful reader this first impression will be reinforced by the body of the advertisement which gives the further impression of detailing the particulars in which the Model 8x26 radio is being compared with a 10-tube radio. Such reinforcement would come from the sentence in the body of the ad reading: "Audio transformer delivers 30% more audible volume without distortion."

Summarizing, it is our finding that the Motorola 8x26 transistor radio was represented in Motorola ads as being comparable in volume or loudness to a 10-tube radio. The parties are agreed by stipulation that the volume or loudness of a radio receiver set is that characteristic of a radio which is known as "audio output". The parties are further agreed that "audio output" is synonymous with "power output". More precisely "audio output" is defined by stipulation of the parties as being the " * * * term used with reference to a radio's 'volume' or 'loudness' capabilities. It is used to express the magnitude of the electrical energy which the radio is capable of delivering to its speaker. Thus, the greater the audio output of a radio, the greater is its volume capability".

It is accordingly clear that the ads in question contain representations that the Model 8x26 radio has a "power output" comparable to that of a 10-tube radio. There is thus no inconsistency as contended by respondent between the advertisement in question and the complaint's charge that respondent has represented that its 8x26 radio was comparable in "power output" to a 10-tube radio.

The issue is now narrowed to the question of whether the representation that the Motorola 8x26 radio is comparable to a 10-tube radio in "power output" is false as alleged in the complaint. This must be answered in the affirmative because respondent has stipulated that "The Motorola Model 8x26 radio does not have the audio output of any known 10 tube radio". The claim or representation is thus false.

Although the allegations of the complaint here under consideration do not technically charge the respondent with any misrepresentations with respect to the Model 8x26's "sensitivity", it is noted and found since the parties chose to litigate the question of the radio's "sensitivity" that the evidence clearly shows that the 8x26 does not have the sensitivity of a 10-tube radio. By stipulation, sensitivity is defined as " * * * the characteristic of a radio that determines the extent to which a radio is capable of receiving *weak or distant signals*. (Emphasis supplied.) The strength of radio signals in the air are

measured in units called microvolts per meter * * *. A radio's sensitivity is the measure of the weakest signal, expressed in microvolts per meter, which is capable of being reproduced satisfactorily by the radio. * * *".

Our above finding that the Motorola Model 8x26 radio does not have the "sensitivity" of a 10-tube radio is based on the sensitivity measurements of the 8x26 conducted by Zenith engineers in the regular course of their duties to test both Zenith and competing brands of radios. These sensitivity measurements by Zenith engineers on the 8x26 were made while the set was still being manufactured and long before the issuance of the complaint herein. Our finding is also based on the testimony of the aforementioned electrical engineer Karl H. Nagel, chief radio tester for Consumers Union, who testified that the 8x26 had only "fair" sensitivity compared to a "good" rating given by Consumers Union to five competing brands of transistor radios and that a 10-tube radio would have considerably greater sensitivity than the 8x26. Respondent's exhibit RX 25 designed to show that by tests made in 1962 shortly prior to the hearing herein that the 8x26 does have sensitivity comparable to 10-tube radio is rejected as being without probative value for reasons similar to those shown above for the rejection of other post-complaint tests in connection with prior issues discussed.

CONCLUSION

For reasons that appear from the above, it is our conclusion that respondent's representation that is Model 8x26 radio set was comparable in power output to a 10-tube radio is false, misleading and deceptive.

4. *"Revolutionary New" Features Claim for Portable Radios*

The Motorola products here dealt with are portable transistor radios known as Models L12 and L14, heretofore referred to in connection with battery life issues. Both were introduced for sale on March 16, 1959, but had relatively short lives as current models as their manufacture was discontinued in less than a year after their first introduction for sale. Portable transistor radios are not to be confused with pocket transistor radios as the portables are a good deal larger and heavier than the pocket models. For example, to give the dimensions of only one of the portables here involved, the L12 is $9\frac{3}{4} \times 6 \times 2\frac{3}{4}$ inches in size and about $3\frac{1}{2}$ pounds in weight.

The complaint charges that respondent has falsely represented that:

Its Model L12 radio set had a revolutionary and new *audio* system. (Emphasis supplied.)

and that:

Its Model L14 radio set contained a revolutionary or new [1] *chassis* and [2] *audio system*. (The numbers and emphasis supplied.)

Respondent admits that it made the above representations concerning the "audio systems" of its Models L12 and L14 and the "chassis" of its L14 but denies they are false. The term "audio system" relates to those components of a radio which have to do with the amplification of sound in frequencies which lie within the audible range of perception by the human ear. The term "chassis" refers to the configuration or arrangement of the working parts of a radio as mounted upon its metal frame.

We take up first respondent's claim that the audio systems of the L12 and L14 were "revolutionary and new". From the testimony of the aforementioned Richard J. Harasek, respondent's senior project engineer, it should be noted initially that the audio systems of the two radios are the same. Thus whatever is said about the audio system of one of the two radios would also be true of the other.

The record shows that the audio systems of the L12 and L14 were *not* "revolutionary and new" in the sense that the respondent was the first radio manufacturer to put a transistor radio on the market with an audio system like that of the L12 and L14. It is an undisputed fact that the Philco Corporation, a well-known competitor of respondent and a pioneer in the radio manufacturing business, manufactured and marketed a transistor radio with an audio system identical to that of the L12 and L14 about a year before latter were placed on the market for sale. The record also shows that respondent's Models L12 and L14 were not even the first model radios put out by respondent itself with an audio system like that of the L12 and L14. Respondent first introduced the audio system in question in its Model 7x25 and that model radio was placed on the market several months before the L12 and L14.

Wholly aside from the fact that the audio system common to the L12 and L14 was not at the time these radios were being manufactured revolutionary and new in the sense of being first of their kind on the market, the record shows that the audio system of the L12 and L14 was not revolutionary or new in a more fundamental sense. The record shows that there are three basic types or classifications of audio systems. They are known as (1) the Complimentary Symmetry Audio System, (2) the Class A Output Audio System, and (3) the Class B Push-Pull Output Audio System. From the testimony of both the expert witnesses appearing in behalf of the Government and the respondent, it is found that the audio system employed in the L12 and L14 is basically the aforementioned Class

B Push-Pull Output System, but due to a variation hereinafter explained the audio system of the L12 and L14 is sometimes described by electrical engineers as the Hybrid Complimentary Symmetry Audio System. The variation referred to is the elimination of the output transformer from the audio circuit which is normally incorporated in the Class B Push-Pull Output Audio System. The function of an output transformer is to energize or drive the loud speaker. Thus the audio system of the L12 and L14 do not have an output transformer and for this reason the audio system in the L12 and L14 is sometimes called the Hybrid Complimentary Symmetry Audio System but basically it remains the Class B Push-Pull Output Audio System, notwithstanding the elimination of the output transformer from its circuit, as is apparent from the following cross-examination of respondent's expert witness, the aforementioned Dr. T. W. Butler, professor of electrical engineering at the University of Michigan, by Mr. Dunn, complaint counsel:

Q. Dr. Butler, isn't it true that the principal difference between the hybrid system and the conventional Class B push-pull system is simply the elimination of the output transformer?

A. Yes, that is the principal difference, that is true.

Q. You will agree, then, that the hybrid complementary circuit is basically a Class B push-pull system?

A. Yes it operates as a Class B push-pull system. (TR. 2209)

The intriguingly named push-pull output audio system is simply a circuit of two transistors operating alternatively, that is, one operates while the other lapses into momentary nonoperation, one pulls while the other rests, very much like the electric bulbs in some signs go on and off in planned cycles.

The evidence shows that the Radio Corporation of America (RCA) began manufacturing radio sets containing the Class B Push-Pull Output Audio System, of which the L12 and L14 is but a variant, as early as 1954 and that between 1954 and 1958,¹⁷ RCA had placed on the market a total of 11 different radio set models employing the Class B Push-Pull Output Audio System.

It is thus evident that the basic audio system known as the Class B Push-Pull Output System, of which the audio systems in the L12 and L14 radios are merely samples, was on the market at least four or five years before the L12 and L14 were marketed in 1959. The radio manufacturing business is highly competitive. It is a fair conclusion from the record here that the major radio manufacturing companies, including respondent, put out new model radios each

¹⁷ It will be remembered that the L12 and L14 radios were placed on the market by respondent in March 1959.

year and that their aim is to do better than their competitors or at least keep on par with them in presenting any new developments in radios which would enhance sales. In these circumstances, it is readily apparent and is found that the audio system of the L12 and L14 radio when introduced in the market five years after RCA had used the same basic audio system in a marketed radio set, lost all right to be termed "revolutionary and new".

Respondent in its proposed findings of fact appears to impliedly agree that there was nothing revolutionary or new *from a technical point of view* about the Class B Push-Pull Output Audio System or its variant the Hybrid Complimentary Symmetry Audio System at the time the L12 and L14 radios were put on the market but argues that "There is no evidence of record that the *purchasing public* understands a new and revolutionary audio system is one that is 'original' or 'unique' and limited only to the first model sold. It is not sufficient that a *patent-conscious engineer* may attach such a restricted meaning to the phrase; the test is the customer's understanding of the phrase." (Emphasis supplied.)

Respondent is correct in its statement that no consumer evidence was presented to show what the purchasing public understands the representation "new and revolutionary audio system" to mean. But as heretofore indicated in connection with other issues herein, sample public opinion is not required for the interpretation of an advertisement. The message or meaning that an advertisement conveys to the prospective purchaser can be determined from the ad itself and other relevant evidence in the record. *Zenith Radio Corp. v. Federal Trade Commission, supra*. In this connection, it becomes necessary to examine the texts of the involved advertisements.

One of respondent's advertisements (CX 5 G) on the L12 radio set reads as follows:

REVOLUTIONARY NEW VOICE FOR THE OUT-OF-DOORS New audio system with push-pull output delivers amazing tone quality with 6 times the audible output required for normal listening.

Similarly, one of respondent's advertisements (CX 5 C) on the L14 radio set reads:

REVOLUTIONARY NEW VOICE FOR THE OUT-OF-DOORS New audio system produces tone quality never before heard in a personal portable.* * * Now Motorola's new revolutionary audio system actually assures 6 times the audible volume needed for normal listening * * * provides richest tone possible for outdoor reception * * *.

The emphasis of these ads is on the "voice" or "tone" of the L12 and L14. These are the words actually used in the ads. The ads then go on to describe the "tone" or "voice" of the two radios as

being "amazing" or of a quality "never before heard in a personal portable" or the "richest". The ads also definitely emphasize the easily *recognizable* superior sound quality for the average listener of the L12 and L14 by the claim that the radios "deliver 6 times the audible volume needed for normal listening". The ads attribute all of these benefits to the "Revolutionary New Voice" produced by the "New audio system" of the L12 and L14 radios. In summary it is found that the advertisements quoted above represent to the average prospective buyer that he will receive immediately recognizable superior tone quality in the L12 and L14 radios due to a new and revolutionary method of producing sound from a radio. The question thus is: Is it true that the L12 and L14 radios have an immediately recognizable superior tone quality for the average listener?

We will assume for purposes of the present discussion that the superior tone benefits claimed in the involved ads are to be attributed to the precise audio system employed by the L12 and L14 radios in 1959, namely, the Hybrid Complimentary Symmetry Audio System, which it will be recalled is essentially the same as the Class B Push-Pull Output Audio System, except that the former does not have an output transformer. It will also be recalled that the use of Hybrid Complimentary Symmetry Audio System in 1959 was relatively new since it was put to use commercially only a year prior to 1959 by one of respondent's competitors, Philco. More narrowly our question now is whether the L12 or L14 radio has the immediately recognizable superior tone claimed by respondent's ads due to its particular audio system (*i.e.*, the hybrid system.)

If the L12 and L14 radios actually had a superior audio system, it would be due to the elimination of the output transformer¹⁸ from the audio circuit because, as agreed to by expert witnesses for both parties, the only essential difference between the hybrid audio system and the push-pull audio system is the absence of the output transformer in the hybrid system and its presence in the push-pull system. From the evidence of record, it is found that the hybrid audio system used in the L12 and L14 system (or the equivalent fact that an output transformer is not used in such system) does not result in anything like the tone superiority claimed by respondent in its ads. On the contrary, the only difference resulting from the use of the hybrid audio system as distinguished from its parent push-pull audio system is a barely audible difference in the low frequency range of the radios. This is apparent from the following examination of

¹⁸ The record shows that the real engineering purpose in removing the output transformer from a transistor radio is to reduce the size of the radio because an output transformer has considerable bulk.

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respondent's expert radio witness, the aforementioned Professor Butler, by complaint counsel Mr. Dunn:

Q. Now doesn't the elimination of the output transformer increase the power output of a radio only one or two decibels?

A. That is true.

Q. Isn't it a fact that one decibel is the smallest increase in volume that even an expert can detect by ear?

A. That is true.

Q. So then you will agree that elimination of the output transformer can increase the audio volume of a given radio by only one or two barely audible steps?

A. That is true. (Tr. 2209-2210.)

In summary it is our conclusion that there was nothing "new or revolutionary" for the consumer about the audio system of the L12 and L14 radios when these radios were put on the market in 1959 because the only improvement resulting from their hybrid audio systems over the parent push-pull audio system would be so slight that the average human ear would not catch it. Also, to repeat, there was nothing new about the L12's and L14's audio system from a radio engineering point of view.

We have dealt above with respondent's claim that the L12 and L14 radio had a new and revolutionary "audio system", but it will be recalled that the complaint also charges the respondent with falsely representing that its L14 radio had a "revolutionary or new chassis". It must be now assumed that respondent is conceding that its representation with respect to the chassis of the L14 was not true since respondent does not present any proposed finding thereon or any argument in its proposed findings of fact or reply brief to the contrary. At any rate the evidence of record conclusively shows that there was nothing revolutionary or new about the L14's chassis. This is established by the testimony of the aforementioned Mr. Roberts, assistant chief of the Laboratory Division of the Federal Communications Commission. Mr. Roberts also testified that there was nothing new about the L14's chassis and audio system when considered together.

CONCLUSIONS

It is our finding and conclusion that respondent's representation that its Model L12 radio set had a revolutionary and new audio system is false, misleading and deceptive.

It is our further finding and conclusion that respondent's representation that its Model L14 radio set had a revolutionary or new chassis and audio system is false, misleading and deceptive.

5. "Most Powerful Long Distance" Issue

The complaint charges that respondent has falsely represented that:

Its Model L14 radio set was the most powerful long-distance all-transistor portable available.

The aforementioned L14 radio, also known as the MOTOROLA RANGER 1000 radio, is a single-band transistor radio as distinguished from a "multi-band" or short wave transistor radio. (The previous section of this section also dealt with the L14 radio but on other issues.)

Respondent admits that it made the above-quoted representation but denies that it is false.

The only evidence presented by complaint counsel that the above-quoted representation was false is evidence to show that at the time the representation was made there were on the market "multi-band" or short wave radio sets with better abilities to get long distance reception than the L14 radio. In line with such evidence, complaint counsel contend that respondent's ads on the L14 radio are tantamount to representations that the L14 would outdo even a short wave portable radio in ability to get long distance stations.

Respondent, on the other hand, contends that no such meaning or interpretation can be properly drawn from its advertisements. It contends that its ads merely claim that the L14 radio had superior long distance ability over competing single-band transistor radios and that the ads do not represent, even impliedly, that the L14 could outstrip short wave radio sets in the matter of long distance reception.

Under these circumstances the texts of the various ads used by respondent to exploit its L14's ability to reach long distance or far away stations become pertinent. *Zenith Radio Corp., v. Federal Trade Commission, supra.*

As assembled by complaint counsel in their reply brief, respondent's various ads dealing with the L14's long distance ability read as follows:

- CX 9: 10 times more station-getting power
10 times more power to reject unwanted stations. Twice the audible volume
- CX 10C: 10 times more power to get stations with tuned RF stage
- CX 12: Most powerful long-distance all-transistor portable
10 TIMES MORE SENSITIVITY to get more stations with tuned RF stage
10 TIMES MORE SELECTIVITY to reject unwanted signals with 3-gang tuning condenser

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- CX 13: Powerful Long-Range Portable. With 10 times more power to get stations.
20% more power to reject unwanted stations. Twice the audible volume without distortion.
- CX 14: Most powerful long-distance all-transistor portable
10 TIMES MORE SENSITIVITY
TWICE THE AUDIBLE VOLUME
20% MORE SELECTIVITY
- CX 15: Most powerful long-distance all-transistor portable
- * * * * * *
- 50% more audible volume from new
audio circuit delivers power needed
to overcome outdoor noises, tone
quality for outstanding distortion-free sound

Although there is a good deal of bombast in the above advertisements, the examiner is unable to read into them any claim by respondents that the L14 radio was being compared with short wave radio sets in the matter of "powerful long distance" reception or any claim that the L14 was being featured as being able to outstrip a short wave radio in the matter of long distance reception. Certainly there is no direct representation to this effect.

If the representation is there, it is present only by implication. However, it is common knowledge that the average single-band radio owner holds the short wave radio, frequently advertised or called a transoceanic receiver, in awe for its capabilities for bringing in distant stations. The average radio user also knows that short wave radios sell at substantially higher prices than the single-band radio. The record shows that the L14 radio set here involved had a list price of \$75 and that the Zenith Royal 1000 short wave transistor radio to which it is being compared in the matter of long distance reception had a list price of \$250. The second short wave with which the L14 is being compared with respect to distance reception was the RCA 1-MBT-6. This had a list price of \$200. All the photographs of the L14 in respondent's advertisements show it to be a single-band radio; there is no attempt to deceive by showing, for example, a shadow multi-band radio at the side of the illustrated L14 radio set.

Although it is, of course, possible that, here and there, there might be a consumer who would be led to believe by the advertisements that representation was being made that the L14 would outdo a short wave receiver in matter of long distance reception, it is found that no significant portion of the consuming public would get such an impression. Even the uninformed radio user would no more expect a single-band radio to do as well in reaching long distance stations as a short wave receiving set than he would expect the fastest of

stock automobiles to equal or outdistance a racing car, no matter how much the "power" of the stock automobile might be stressed in an advertisement.

Since we have found that the ads in question do not represent that the L14 radio will surpass short wave receivers in ability to get far distant stations and since the only evidence adduced by complaint counsel in support of the charge of the complaint that the involved representation is false is evidence to show that certain short wave radio sets surpass the L14 in capacity to receive long distance stations, it is concluded that counsel supporting the complaint have failed to prove the charge of misrepresentation here under consideration.

Normally a conclusion such as the above would terminate the discussion of the issue. The examiner, however, recognizing the possibility that the Commission may disagree with his conclusion on appeal, deems it advisable to set forth certain additional findings of fact to the end that the Commission on appeal may have all facts required to dispose of this matter under any hypothesis.

The evidence shows that the ability of a radio to reach far distant stations is dependent upon two factors, to wit, its "power" and its "sensitivity". By written stipulation of the parties, "power" or "power output" (the two are interchangeable) is defined as the measurement of electrical force at work or the effect of the application of electrical energy. The parties have also stipulated that "sensitivity" is defined as the characteristic of a radio that determines the extent to which a radio is capable of receiving weak or distant signals. The "sensitivity" of a radio is also measurable. The components of a radio receiving set which have to do with "power output" are different than the components which have to do with its sensitivity.

From the parties' definition of the term "sensitivity" and from the record as a whole, it is found that the "sensitivity" characteristics of a radio plays the predominant role in the radio's ability to obtain long distance stations and that the "power output" aspects of a radio plays a minor or insignificant part in the ability of the radio to get far distant stations.

There are two sets of sensitivity measurements of the L14 radio in evidence. One ¹⁹ set consists of the measurements of two different L14 radios by Walter J. Miller, a radio engineer for Zenith. Miller tested the first of these sets in 1959 or about three years prior to

¹⁹ The second or other set of sensitivity measurements referred to is the set adduced by respondents in their defense of the issue here under consideration. This second set of sensitivity measurements are discussed on page 105 below.

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the issuance of the complaint herein. The test was made in connection with his routine duties at Zenith and as part of Zenith's program to test not only its own products but also competing radios of other manufacturers. He tested the second L14 radio in 1962. The sensitivity measurements he got on the second L14 radio generally corroborated the sensitivity measurements he obtained in 1959 on the first L14 radio set. It is found that the sensitivity measurements made by Mr. Miller on the two L14 radios, one in 1959 and the other in 1962, are true and accurate and are accorded full credibility.

The record also contains sensitivity measurements of the Zenith Royal 1000 radio, the aforementioned Zenith multi-band or short wave radio. These measurements were made in 1957 by Zenith radio engineering personnel in the course of routine duty in accordance with Zenith policy to test competing brands of radios as well as their own products. Similarly the record contains sensitivity measurements on the aforementioned RCA 1-MBT-6, also a multi-band or short wave radio set,²⁰ made by RCA engineering personnel in routine testing procedure in 1958.

Based on a comparison of the sensitivity measurements of record for the above-described Zenith multi-band radio receiving set with the sensitivity measurements of record on the L14 radio as determined by Mr. Miller, it is found that the Zenith multi-band set enjoyed superior "sensitivity" ability to bring in long distance stations over that of the L14 radio. Similarly, based on a comparison of the sensitivity measurements of record for the mentioned RCA multi-band radio receiving set with the sensitivity measurements of record on the L14 radio as determined by Mr. Miller, it is found that the RCA multi-band set also enjoyed superior "sensitivity" ability to bring in long distance stations over that of the L14 radio.

The record also contains "power output" measurements for the L14 and the above-mentioned Zenith Royal 1000 and the RCA 1-MBT-6. The measurement of the "power output" of the L14 is shown on a document supplied by respondent to the Commission in 1960 in the course of the precomplaint investigation of this matter. That document is now in evidence as CX 101 A-C. (It should be noted that the same document does not reflect any "sensitivity" measurements for the L14 which, as shown above, is far more important than "power output" in the matter of bringing in long distance

²⁰ On page 64 of their proposed findings of fact, complaint counsel describe the RCA 1-MBT-6 as a "multi-band portable radio", but on page 32 of their reply brief, complaint counsel state "There is no evidence in the record establishing that the RCA 1-MBT-6 radio is a short wave set. The oral evidence conclusively shows that the mentioned RCA set is a short wave receiving set. See also CX 93 which shows the RCA set to be a seven-band receiving set. The Zenith Royal 1000 has eight bands.

stations.) The "power output" measurements of record for the Zenith Royal 1000 and the RCA 1-MBT-6 are the measurements made by the radio engineering personnel of Zenith and RCA, respectively, in routine tests performed several years prior to the issuance of the complaint. A comparison of the "power output" measurements of the L14 as reflected on the said CX 101 A-C with that of the Zenith Royal 1000 and the RCA 1-MBT-6 as shown from the laboratory test sheets of Zenith and RCA show that the latter have the superior "power output" measurements and would, therefore, have better ability to bring in long distance stations than the L14 radio insofar as "power output" affects such ability which, as shown, plays a minor part compared to the "sensitivity" of a radio. From this it is found that the Zenith and the RCA short wave radio sets have better capacity to obtain distant stations insofar as "power output" is concerned (as distinguished from "sensitivity" on which they are also superior) than the L14.

To counter the above evidence adduced by complaint counsel, respondent relies on certain sensitivity measurements²¹ it made in 1962 to show that the L14 radio had the "most powerful long distance" quality it attributed to the L14 in the advertisements shown above. In the month or two before the hearing herein started, respondent had its engineering personnel take the sensitivity measurements of six of its L14 radios and five competing single-band portable radios. The results of these tests are shown in RX 37. RX 37 shows that the average of the sensitivity of the tested six L14 radios was superior to the sensitivity of any of the tested five competing portables. Similarly a comparison of the mentioned average sensitivity of the tested six L14 radios with the sensitivity measurements made by the Zenith and RCA engineering personnel on the Zenith Royal 1000 and the RCA 1-MBT-6, above referred to, shows the L14 radio to have the superior sensitivity.

The examiner rejects the above favorable sensitivity measurements of the L14 radio adduced by respondent into the record as being without probative value for reasons similar to those shown above for the rejection of other *post-complaint tests* made in preparation for trial in connection with prior issues discussed above. As between measurements made routinely and without thought of use for purposes of hearing and measurements made just prior to hearing and for use as evidence, the examiner accepts the former and rejects the latter. This is the situation under the present issue as in previous issues discussed above.

²¹ This is the second set of sensitivity measurements of the L14 of record referred to earlier above.

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Finally it should be noted that no weight is being given to evidence adduced by complaint counsel showing that two competitive single-band transistor model radios manufactured by the Admiral Corporation have a superior "power output" to that of the L14 radio. This is because the record fails to show the "sensitivity" measurements for these two Admiral model radios. As shown above, the sensitivity measurements of a radio, as distinguished from its power output, plays the predominant role in the radio's ability to bring in long distance stations.

CONCLUSION

Bearing in mind that it has heretofore been found that respondent's representation that "Its Model L14 radio set was the most powerful long-distance all-transistor portable available" was not a representation that the L14 radio was more powerful than short wave radio sets in the matter of bringing in long distance stations and bearing in mind that it was also found above that there is no evidence true from both a "sensitivity" and "power output" point of view other than evidence adduced by complaint counsel to show that the above-described Zenith and RCA short wave radios surpass the L14 radio in ability to obtain long distance stations, the examiner now finds and concludes that complaint counsel have failed to meet the burden of proof required to show that respondent's representation that "Its Model L14 radio set was the most powerful long-distance all-transistor portable available" was false, misleading and deceptive.

6. *"Tube Saving" Device Issue*

The complaint charges that respondent has falsely represented that:

Its sentry system contained in certain of its receivers was a protective device that eliminated 3 out of 4 service calls, and tripled TV life expectancy.

Respondent admits that it made the above representation but denies that it is false or misleading.

The above-quoted charge of the complaint is based on an advertisement by respondent, also set forth in the complaint which reads as follows:

Golden Tube Sentry System * * * works automatically to protect every tube in the set against warm-up power surge * * * main cause of TV failure. It's engineered to eliminate 3 out of 4 service calls * * * triples TV life expectancy.

The above ad was published in a February 1959 edition of *Electrical Merchandising*. (CX 30 and Stip. of Facts, par. 23.)

Similar advertisements by respondents on its sentry system read as follows:

Saturday Evening Post and Life, September 1959.

Only Motorola TV has the Golden Tube Sentry System that ends warm-up power surge, main cause of TV failure * * * triples TV life expectancy * * * is engineered to eliminate 3 out of 4 service calls. (CX 41.) (See Stip. of Facts, par 23 re CX 41.)

In Life, February 1959 and Saturday Evening Post, February 1960.

NEW GOLDEN TUBE SENTRY SYSTEM * * * the electronic miracle introduced by MOTOROLA * * * now regarded as the industry's greatest advancement for trouble-free and reliable TV. The Golden Tube Sentry System protects every tube in your set against warm-up power surge (the main cause of premature TV failure), works to prolong automatically the life of each tube. Triples life expectancy of your television set * * * engineered to eliminate 3 out of 4 service calls. And the Golden Tube Sentry unit is so dependable, it's guaranteed for five years! (CX 42 and Stip. of Facts, par. 23.)

In May 1959 Edition of Chicago Stagebill.

Recent tests proved Motorola to be best in performance * * * by far the most reliable of all makes tested. *The reason?* Exclusive Tube Sentry protection. Tube Sentry ends main cause of TV failure * * * triples TV life expectancy * * * is engineered to end 3 out of 4 service calls. And only Motorola TV has Tube Sentry. (Emphasis supplied.) (CX 39 and Stip. of Facts, par. 23.)

From our analysis of the above-quoted ads and all other statements in the full advertisements from which the quotations were taken, the examiner finds that respondent through such quoted ads represented to the purchasing public that its "Golden Tube Sentry System" would in and of itself and without assistance from any other components in its television sets eliminate 3 out of 4 service calls and triple the TV life expectancy. *Zenith Radio Corp. v. Federal Trade Commission, supra.*

In other advertisements respondent does not make the representation that its sentry system will alone "end 3 out of 4 service calls" but states that its sentry system *in combination* with its so-called "Golden 'M' Tubes" will accomplish this result.

Thus an ad by respondent published in the *Home Furnishing Daily* in 1959 reads as follows:

Only Motorola Dealers can sell TV with * * * Premium-Rates Golden "M" Tubes * * * that last twice as long as ordinary TV tubes * * * This, combined with Golden Tube Sentry System that eliminates 3 out of 4 service calls and triples TV life expectancy, produces TV so reliable, Motorola backs every set you sell with an exclusive Golden Guarantee * * * (Emphasis supplied.) (CX 36 and Stip. of Facts, par. 23.)

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Similarly another of respondent's ads published in *Home Furnishings Daily* on an unspecified day in 1959 reads:

*Combined with long-life Golden "M" Tubes (which are 100% more reliable, on the average, than any other tube ever put into home TV * * * Golden Tube Sentry System now makes premature tube failure a thing of the past. * * *. (Emphasis supplied.) (CX 35 and Stip. of Facts, par. 23.)*

The above ads constitute an admission by respondent that its tube sentry system would not in and by itself end 3 out of 4 service calls as it represented in the charge here under consideration.

But wholly aside from this admission, there is abundant expert evidence of record from which a determination may be made as to the truthfulness of respondent's representation that its sentry system will end 3 out of 4 service calls.

Preliminarily, it is found from our analysis of the respondent's numerous advertisements that the term "service calls" as used in its ads would be interpreted by the consuming public to mean service calls not for all causes but only in connection with tube failures. This interpretation must follow from the very title or name of the device, to wit, "New Golden Tube Sentry System", which as will be noted includes the words "sentry" and "tube". The word "sentry", of course, means standing guard. When placed together, the two words, "tube sentry", convey the unmistakable impression that the "sentry" stands guard over the TV's tubes. This interpretation is borne out by many of respondent's ads which state and claim that the tube sentry system "protects every tube". We accordingly dismiss as being irrelevant, evidence adduced by complaint counsel to show that more than half of the service calls made by servicemen are unrelated to tube failures under which complaint counsel had sought to prove that the involved representation (*i.e.*, elimination of 3 out of 4 service calls through the use of the tube sentry system) is false *ipso facto*.

The issue here relates to respondent's so-called "tube sentry system". The evidence shows that respondent in its advertisements uses the phrase "tube sentry system" indiscriminately to describe two separate TV components or devices it installs in its TV sets. (Tr. 2562, 2671; see also complaint counsel's Proposed Findings, page 92, and their Reply Brief, page 35.) One of these two devices is more specifically described in some of respondent's ads as a "tube sentry unit" which will hereinafter be referred to as "sentry unit" or "unit". The "sentry unit" is used only in respondent's top or most expensive lines of television sets. Respondent in 1958 received a patent on the unit; it also caused the unit to be registered under the trade name of "Tube Sentry". It is manufactured for respondent pursuant to its

specifications by Chicago Telephone Supply Company at a cost of approximately 50 cents each but Chicago Telephone has a prior patent on a similar device designed for the same purpose as that advertised by respondent. Respondent's patented sentry unit has been made available by respondent through Chicago Telephone to all other television set manufacturers but neither respondent's patented sentry unit nor Chicago Telephone's patented device serving the same purpose have received anything like general acceptance by the industry. No major manufacturer of television sets uses the device except respondent.

The "sentry unit" is about the size and shape of the now rarely seen penny box of matches and is frequently illustrated in respondent's advertisements. Essentially it is a very simple device made up of a (1) resistor and (2) a thermostatic switch. The resistor, a small piece of metal, is used to cause the electrical current to be applied gradually to the *filaments* of the tubes in the television set and the thermostatic switch is used to delay the application of voltage to the *plates* of the tubes.

The second or alternative device used by respondent as a component in its TV sets under the advertised name of "Tube Sentry System" is a simple little resistor about the size and shape of a quarter but somewhat thicker which will hereinafter be called the "Wuerth device", as it is manufactured by the Wuerth Tube Saver Corporation. Respondent uses this device, which costs about 15 cents, in its lower or more popular priced TV sets. The device functions to allow a gradual application of electrical current to the filaments of the TV tubes. In this respect it works precisely as the first mentioned function of the above-described "sentry unit" but it lacks the latter's second mentioned function.

One or the other of the two devices have been used continuously by respondent in most of its TV models since 1958, except that the use of the "sentry unit" was commenced in 1957. As heretofore noted, the advertising phrase "Tube Sentry System" has been used by respondent to refer indiscriminately to one or the other of the two described devices. Respondent's various advertisements of record do not generally give the prospective customer any indication as to which of the two devices are used in the TV models illustrated in the ads.

But irrespective of whether the advertised TV set contains one or the other of the two devices as respondent's so-called "Golden Tube Sentry System", respondent in its advertisements represents that the said "Golden Tube Sentry System" will eliminate 3 out of 4 service calls and triple TV life expectancy.

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Complaint counsel presented expert witnesses to show that neither of the two devices used under the designation of "Golden Tube Sentry System" would fulfill respondent's representation of eliminating 3 out of 4 service calls and tripling TV life expectancy.

We take up first the expert testimony adduced by complaint counsel on the Wuerth device. Testimony was received on the results of life tests on the device from highly qualified TV engineers from the engineering staffs of Zenith and the Admiral Corporation. Both Zenith and Admiral have conducted controlled life tests on the Wuerth device. "Life tests" are performance tests, sometimes accelerated, designed to simulate the useful life of television parts. By the term "controlled", it is meant that life tests were performed simultaneously on a number of TV sets fitted with the Wuerth device and an equal number of TV sets which did not have the Wuerth device. The objective of such controlled life tests was to determine by experiment whether the Wuerth device had any value in preventing TV tube failures.

In tests which began late in 1956, qualified Zenith electrical engineers simultaneously operated three TV sets fitted with the Wuerth device and three other identical TV models without the device for a total of 1000 hours under identical on and off cycling conditions designed to simulate actual use by consumers. The aim of the testing of this limited number of devices was to determine whether there was sufficient promise in the contrivance as a tube failure preventer to justify more extensive tests on the device. The results of the life tests on the Wuerth devices were found by the Zenith engineers to be so completely lacking in promise as a tube saver that the Zenith laboratories abandoned further life testing thereon and recommended to management against the adoption of the device in Zenith TV sets. Zenith has never over the course of the years used the Wuerth device in any of its TV models.

Admiral conducted similar life tests in late 1958 on the Wuerth device but on a more extensive scale, as ten such devices were used in the tests. Ten TV sets equipped with the device and ten identical TV sets without the device were played for a total of 1,850 hours. As a result of these life tests, Admiral's engineering staff concluded that the Wuerth device had no value as a tube saver. Admiral has never used the device on any of its TV models.

Respondent did not offer any evidence to show that the Wuerth device affixed to its lower priced TV models and advertised as the "Golden Tube Sentry System" had any value as a preventer of tube failures.

Based upon the life tests conducted by Zenith and Admiral, it is found that the Wuerth device is wholly without value as a component to prevent tube failure.

To return now to the somewhat more complicated "sentry unit" used in respondent's top line of TV sets and also described in its advertisements as the "Golden Tube Sentry System", the record herein similarly contains the result of life tests made on the unit by respondent's competitors, including the aforementioned Admiral and Zenith companies and in addition General Electric Company.

It is specifically found that each of the above-named competitors conducted its life tests with "sentry units" identical in design with those used by respondent as manufactured by Chicago Telephone and as made available to them by Chicago Telephone by agreement of respondent as aforementioned.

General Electric conducted life tests on the "sentry unit" in late 1958 and early 1959 in which 72 identical TV sets were used, of which half were equipped with the unit and the other half, not. Each of the 72 TV sets was played for a total of 4,000 hours or the equivalent of two years of actual operation. As each set had 16 tubes, a total of more than 1300 tubes was involved in the life tests. As a result of the tests, the G.E. engineering staff in charge of the testing concluded that no significant improvement in the reliability of the tubes can be attributed to the "sentry unit". They also concluded that the unit would have no significant effect on the number of service calls required to keep a television receiver in operating condition. General Electric has never adopted respondent's "sentry unit" or equivalent in the production of television sets.

Zenith conducted life tests on the "sentry unit" in early 1958. Fourteen identical TV sets were used in the test, half of which were equipped with the unit and half were not. The sets were operated for a period equivalent to at least four years of actual use in the home. Upon analysis of the test results, Zenith engineers concluded that the "sentry unit" was useless as a tube saver. Zenith has not at any time adopted the "sentry unit" or any similar device in its lines of television receivers.

Admiral also engaged in life testing the "sentry unit". The tests made in 1959 involved 50 identical TV sets in which only half were fitted with the unit. Each of the 50 sets was played for a total of 2200 hours. Upon completion of the test, the Admiral engineers found that the "sentry unit" produced no results as far as reliability or prolonging the life of tubes is concerned. Admiral has never incorporated the "sentry unit" or its equivalent in any of its TV sets.

Through the testimony of several of complaint counsel's expert witnesses from the aforementioned competitors of respondent, it is

established that the introduction of the "sentry unit" in a TV set increases the possibility of trouble with the set because the unit adds another component to the receiver.

The record also shows that there has been a steady increase in the reliability of TV tubes over the years since 1955 by reason of technological improvements both in the manufacture of the tubes and in the design of TV receiving sets. Thus an engineering report of record by Sylvania Electric Products, Inc., states: "It is important to observe that the percent of tube types having no failures from 1955 to 1961 has shown a steady increase from 38.5% to 72.5% while operated under the accelerated conditions designed to increase the number of failures". (CX 106 C.) The same report shows that out of significant number of tubes tested by Sylvania the percentage of tube failures dropped from 4.3% in 1957-1958 (one year period) to 3.6% in 1958-1959 and 1959-1960 (two year period) and to 2.9% in 1960-1961 (one year period). (CX 106 B.)

Further evidence of record showing the improvement that has taken place in TV tubes in recent years is reflected in a communication dated February 7, 1961, from a tube manufacturing division of Columbia Broadcasting System, Inc., to the chief engineer of Admiral:

Our Mr. Herrell has forwarded your request for an answer to the question "Has the increased reliability of receiving tubes resulted in lower replacement sales of receiving tubes?" The answer to this question is unequivocally *yes*. (Emphasis as in communication.)

We, as a manufacturer of tubes for both the original equipment and the replacement markets, can attest to this. Furthermore, extensive life test records show that for a given failure rate of tubes, we have made approximately a three fold improvement in the past several years. (CX 105.)

In opposition to the evidence adduced by complaint counsel as set forth above and in defense of the charge here under consideration, respondent has introduced evidence intended to prove that its "sentry unit" has the tube saving virtues it claims in its advertisements, namely, the ability to end 3 out of 4 service calls and to triple TV life expectancy. For such defense, respondent relies in part on life tests it has made on the "sentry unit" and on the experience it has had over a number of years with the return of TV tubes under the warranty it issues with each set sold to consumers.

Respondent's life tests on the "sentry unit" is shown in a "Summary of Life Test Data" which is in evidence as RX 52. The tests shown therein were not "controlled" life tests in the sense that an equal number of identical TV model sets, half without the "sentry unit", were tested simultaneously for a stated number of hours as was done by General Electric, Admiral and Zenith as shown and

reported above. For example, in September of 1957, respondent began a life test on 20 TV sets equipped with the "sentry unit" but never (insofar as RX 52 shows) ran a test on the same model TV sets without the unit. RX 52 also fails to show that any tests were made at all in 1958 in preparation for respondent's 1959 line of TV receiving sets which received extensive advertising.

Summarizing the data shown on RX 52, it shows that respondent between 1957 and 1961 conducted five life tests on TV sets fitted with the "sentry unit", and that between 1960 and 1961, it conducted five life tests on TV sets not equipped with the "sentry unit". In the five tests with the "sentry unit", each test involved 10 TV sets except that the test conducted in 1957 (respondent's earliest) involved 20 TV sets. In the five tests without the sentry unit, each individual test involved ten TV sets except that one of the three tests made in 1961 involved five TV sets. The combined tube failure in the five tests of TV sets fitted with the sentry unit totaled .69 per TV set. The combined tube failures in the five tests of TV sets not equipped with the sentry unit totaled 2.36 per TV set.

The remaining evidence on which respondent relies for its defense against the charge here under consideration is the experience it claims to have had over the years with the return of receiving tubes under the warranty it issues with each TV set sold to consumers. It contends that this experience sustains its advertised claim that the "sentry unit" will eliminate 3 out of 4 service calls and triple TV life expectancy.

Respondent's assembled data on warranty returns of receiving tubes is reflected in RX 36. The exhibit shows a 11.6% return of tubes in 1954 and a dramatic drop in 1955 to 6.1%. This drop occurred at least two years before respondent commenced the use of the "sentry unit" in some of its TV models. In 1956 there was a smaller reduction of returns to 5.7% and in 1957 to 4.6%. In 1958 there was another sharp drop to 1.8%. This percentage of returns with slight or no change continued into 1959, 1960 and 1961.

One of respondent's highly placed engineers attributed the drop in tube returns in 1958 to 1.8% from the previous year's percentage of 4.6% to the incorporation of the "sentry unit" in respondent's TV sets. On cross-examination of respondent's engineers with respect to the return data on RX 36, it was shown that the tube returns in 1957 and earlier years reflected returns made within the then 90 day warranty period on such tubes whereas the tube returns in 1958 and subsequent years reflected returns made within the new one year warranty period. This would have the effect of depriving the large reduction of returns in the year 1958 over that of 1957 of any signifi-

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cance as greatly unequal warranty periods of returns are being compared. It seems wholly likely that the returns in a warranty period as short as 90 days would exceed the percentage of returns over the longer warranty period of one year as it is reasonable to assume that manufacturing defects in tubes would show up within the first 90 days of operation.

The cross-examination and our findings above also show that not all of respondent's tubes in the years 1958 through 1961 were equipped with the "sentry units", as the evidence is quite clear that respondent used such units only on its top line TV sets. But the warranty data covers tube returns for all TV models sold by respondent, both with and without the tube sentry. Accordingly, it would be wholly improper to attribute the reduction in tube warranty returns in 1958 to the adoption of the "sentry unit".

The experience of other TV set manufacturers with tube return warranty data further shows that such data is virtually useless as statistical matter relating to tube life. The experience of Admiral, one of the major producers of TV sets, shows that "on the average, half of the tubes will be good that are returned from the field". Other difficulties pointed up in the record by the Admiral's chief television engineer with such warranty data is that it is submitted by field service personnel with little or no experience and even a hostility for the accounting procedures required to make such data accurate from any point of view. Thus, he states: "For example, in our returns [of tubes under warranty] we receive many tubes that Admiral Corporation has never used or, perhaps, tubes that we have used as much as ten and fifteen years ago. This is not uncommon." He further characterized the use of warranty return data for analysis of tube failures as " * * * after the-fact information; and we much prefer rather than to put the burden on the ultimate consumer, to determine reliability * * * We determine this at factory level and we do this with our accelerated life test * * *". (Tr. 3838-3839.) It is found that respondent's warranty data as contained in RX 36 is subject to the same inherent inaccuracies as related by Admiral's chief TV engineer as it must be assumed that respondent's field personnel have the same human frailties as Admiral's.

Respondent does not manufacture the receiving tubes it uses in the TV sets it produces. All tubes in a television receiving set other than the picture tube are known as receiving tubes. In the roughly four year period, 1957-1961, reflected in RX 52, Sylvania and General Electric were among respondent's principal suppliers of receiving tubes. It was shown above that Sylvania tubes enjoyed a marked improvement in reliability in the years between 1958 and 1961.

Similarly the reliability of G.E. receiving tubes was improved 25% to 50% in and about the year 1958.

The above completes our review of the principal evidence adduced by the parties on the question here under consideration of whether respondent's "sentry unit" is capable, as represented, of eliminating "3 out of 4 service calls". The clear weight of the evidence shows that the "sentry unit" is utterly without value as a preventative of tube failures. Such principal TV set manufacturers as Zenith, General Electric and Admiral have life tested the device and found it worthless as a tube saver. It will be remembered that these life tests by respondent's competitors were conducted two or more years before the complaint herein was issued for their own internal purposes and without thought of use in litigation; their accuracy and credibility cannot be challenged. Certainly, if the "sentry unit" could do what respondent claims it can, it would have been welcomed and hailed by the industry for its capacity to save tens of thousands of dollars in the way of tube returns during the warranty period. The fact remains that not one of respondent's major competitors has seen fit to incorporate the device in their TV sets.

The inherent defects in the life tests and tube return warranty data submitted in evidence by respondent as RX 52 and RX 36, respectively, appear from the mere recital of the facts with respect to each as set forth above. The most noteworthy fact about respondent's representation that the "sentry unit" would end "3 out of 4 service calls" is that the representation was made without any prior proof that the sentry would do what respondent claimed it would. Respondent's so-called life test of 1957 on 20 TV sets fitted with the device cannot, standing alone, constitute proper proof of the truthfulness of the representation. Convincing proof requires simultaneous life testing of an adequate group of identical TV sets divided equally into sets fitted with the device and those not fitted with the device. This is, as stated above, known as a controlled life test. This is the type of test that respondent's competitors, G.E., Zenith and Admiral made on the device. Respondent had not to the date of the hearing made any similar controlled tests on the "sentry unit".

Similarly the serious inherent defects in Respondent's Exhibit 36 or summary of receiving tube returns made within warranty periods compel the rejection of the summary. These defects are set forth in our evidentiary findings above. It is sufficient here to again note the fact that the warranty data includes returns of tubes from sets which were never even equipped with the "sentry unit". This in itself destroys the summary as having any value as proof that the

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"sentry unit" ends 3 out of 4 service calls as represented by respondent.

But even if the evidence adduced by respondent as outlined above in its attempt to substantiate its claim that the sentry unit eliminates 3 out of 4 service calls was accepted at full face value, it would be outweighed by the evidence showing that respondent's leading competitors have life tested the device and found it useless as a tube saver and by the further fact that none of the big TV set manufacturers, except respondent, have adopted the device. The evidence is also conclusive that the reliability of tubes has been improved three-fold in the years between 1957 and 1961. Any improvement respondent may have had in the way of fewer warranty returns of tubes since 1957 must be attributed to this factor.

Respondent's life tests and warranty data on the "sentry unit" designed to substantiate its claim that the unit ends "3 out of 4 service calls and triples TV life expectancy" are rejected as being without probative value.

CONCLUSION

It is found and concluded that respondent's representation that its sentry system contained in certain of its receivers was a protective device that eliminated 3 out of 4 service calls and tripled TV life expectancy is false, misleading and deceptive.

7. *"New Tube-Saver Electron Gun" Issue*

The complaint charges that respondent has falsely represented that:

The picture tubes contained in certain of its receivers were constructed to last 10 times longer than comparable picture tubes.

Although respondent in its pleadings denies that the above representation was made, the fact that the representation was made is now admitted by respondent in its proposed findings of fact. Respondent in its pleadings denies that the representation is false.

The complaint sets forth the following advertisement by respondent as typical of the advertisements which gave rise to the charge here under consideration:

Only Motorola Dealers get to sell TV with * * * NEW TUBE-SAVER ELECTRON GUN that makes Golden "M" Picture Tubes 10 times more reliable than ordinary picture tubes.

The above ad appeared in the November 12, 1959, issue of *Home Furnishings Daily*. (CX 52) The same representation in substance

also appeared in an ad in the November 29, 1959, edition of the *Chicago Sunday Tribune* wherein respondent represented:

Motorola-designed Golden "M" premium-rated picture tube has 10 times the effective cathode area for 10 times longer tube life than *conventional* picture tubes. (CX 44 N) (Emphasis supplied.)

Similar advertisements also appeared in *Life* and in one of respondent's multi-page brochures. (RX 1 and RX 1 G; CX 50 E) All of the advertisements of record relating to the representation here under consideration were published in 1959 and pertain to respondent's 1960 line of TV sets.

Respondent attributes the represented "10 times longer tube life" of its so-called Golden "M" Picture Tubes to the type or design of "electron gun" it uses therein.

All picture tubes, regardless of make and design, have electron guns. The function of the electron gun is to shoot focused streams of negatively charged particles, called electrons, on the viewing screen of the picture tube where the particles form the pictures the viewer looks at.

The electron gun is located at the narrow neck-end of the picture tube. It contains a cathode at the beginning of the neck-end of the tube and an adjacent or connecting series of hollow metal cylinders resembling the rod of a gun, hence the name "electron gun". The cathode, an alloy, when heated, is the emitting source of the electrons. The cylinders, being adjacent to the cathode, draw the electrons from the cathode by means of electrical force and pass them on in proper focus to the viewing screen at the other end of the picture tube. In the illustration of the electron gun here of record (RX 45), there are five such cylinders, usually called "grids" but more easily visualized as cylinders, in the depicted electron gun. Each cylinder or grid in the gun rod hastens the passage of the stream of electrons within it by its own separate application of voltage on such stream. In every gun, regardless of type, there are spaces between each cylinder or grid which are essential to their ability to make separate and different applications of voltage.

The above is a description of the basic, standard electron gun or picture tube. It will be hereinafter referred to as the *conventional* electron gun or picture tube.

The picture tube which respondent advertised as lasting 10 times that of the conventional picture tube is built essentially the same as the conventional electron gun or picture tube. The single physical difference of any possible significance (see respondent's Proposed Findings of Fact at page 64) between the conventional tube and respond-

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ent's advertised picture tube is that in the advertised tube one of its five cylinders or grids, known as the "G-3", protrudes into the "G-2" cylinder which in turn is directly adjacent to the cylinder, "G-1", which contains the cathode, whereas in the conventional electron gun there is no such protrusion of G-3 into G-2.

Respondent's advertised picture tube is known as the *intrusion* electron gun, presumably because of the protrusion of G-3 into G-2, and will be so hereinafter referred to. The design differences between the conventional and intrusion types of electron guns are frequently so vague that it is difficult for experts to tell when a tube leaves off being conventional and becomes an intrusion gun. (Tr. 1415, 2449, 3734)

In both the conventional and intrusion electron guns, the electrons are drawn from the surface of the cathode through a hole or aperture in the electron gun approximately 1/8th of an inch in diameter except that the Rauland Corporation, a leading cathode ray tube manufacturer, produces and distributes a conventional picture tube with an aperture 2.6 times as large as the emitting apertures of its competitors. (Tr. 3624)

The cathode has only a limited number of electrons which it can emit. When this limited supply of electrons has been used up, the picture becomes dead.

It is respondent's theory that the intrusion electron gun by reason of the protrusion of its Grid-3 into its Grid-2 is able to penetrate to a greater surface of the cathode in Grid-1 than is possible in the conventional electron tube and is thus able to reach and draw electrons from the outer surfaces of the cathode which the conventional gun because of its supposedly lower penetration into the cathode does not reach and make use of.

Respondent contends that this presumed utilization by the intrusion picture tube of a wider area of the cathode's electron emitting surface than that of the conventional picture tube gives the intrusion tube a ten times longer life than the conventional tube.

The record shows that respondent in 1959 and 1960 was not the only user of the intrusion type picture tube in the industry. There are a number of manufacturers of the intrusion tube, among them being Tung-Sol Electric, Inc., and National Video Corporation. The tubes are manufactured under serial number 21CBP4 or 21CBP4A by all tube manufacturers thereof. One of respondent's suppliers of the intrusion tube 21CBP4 during the period March 1, 1959 to March 1, 1960 was Tung-Sol. In the same period Tung-Sol also supplied the 21CBP4 picture tube to Emerson Radio & Phonograph Corporation, Trav-ler Radio Corporation, Olympic Radio & Television Company and a few to The Magnavox Company. The

21CBP4 tube manufactured by Tung-Sol for respondent was made to respondent's specifications. The record, however, shows that the tubes under this number supplied by Tung-Sol to all of its customers, including respondent, were of the same quality and essentially the same construction, and that differences in specifications did not significantly effect longevity or performance. National Video Corporation has also supplied respondent and some of its competitors with the 21CBP4 and the 21CBP4A picture tubes. The testimony of National Video's vice president in charge of engineering and research, Mr. A. D. Giacchetti, establishes that the tubes sold by National Video to respondent have no greater reliability, *i.e.*, longevity, than the tubes it sells to any of its other customers such as Admiral, Trav-ler, Muntz, and others. All tubes sold by National Video are subject to the same reliability test before they are released from its factory for distribution.

In its proposed findings of fact and reply brief, respondent appears to argue that "the application of the [receiving] tubes in the chassis" or in other words, its circuitry, is also in part responsible for the longer life it claims for its intrusion picture tube over the conventional picture tube. This is a departure from the issue here under consideration as respondent admits in its proposed findings of fact that it represented that its intrusion picture tube is "constructed to last 10 times longer than comparable picture tubes". (Emphasis supplied.) In other words, respondent's ads say that it is the construction of its picture tubes alone which make them last 10 times longer than the conventional picture tubes, not construction plus "tube application". The "tube applications" in respondent's TV sets are accordingly irrelevant to the issue. It was thus not up to complaint counsel to come forward with proof that respondent's "tube application" could not give respondent's intrusion picture tube any part of the claimed ten-fold longevity over the conventional picture tube and respondent did not come forward with any proof that its "tube application" could do this. The record does, however, show, as might be expected, that the "tube applications" of the major TV set manufacturers, including respondent, are pretty much the same. (Tr. 454)

It will be recalled that the issue here under consideration is whether the intrusion type picture tube used by respondent in its so-called Golden "M" Picture Tube does actually last 10 times longer than the conventional type picture tube as represented by respondent in its advertisements. On this issue the parties produced both theory and tests to substantiate their respective sides of the issue. Complaint counsel place their emphasis chiefly on actual comparative life tests performed on the two types of picture tubes to prove the negative

of the issue. Respondent places chief reliance and emphasis on theory to prove the affirmative of the issue; this appears from the amount of space, in both briefs and transcript, devoted to a defense based on theory as against test.

Counsel supporting the complaint placed in the record the results of life tests made on intrusion type picture tubes by the engineering laboratories of Admiral Corporation, one of respondent's major competitors, and by the Rauland Corporation, a manufacturer of television picture tubes. In the industry picture tubes are referred to as "cathode ray tubes".

Admiral uses the intrusion type picture tube and the conventional picture tube in almost equal amounts. Digressing for the moment from the issue of longevity to what the parties are agreed is the unrelated matter of picture quality, Admiral has found that there is a difference in picture quality produced by the two types of picture tubes under consideration but this difference shows up only in the larger or 23-inch TV sets. In the 23-inch TV set, the intrusion picture tube produces a better quality picture than the conventional picture tube. In the smaller 19-inch set, Admiral has found no difference in the picture quality produced by either of the two types of tubes. Accordingly, Admiral uses the conventional picture tube in its 19-inch TV sets and the intrusion picture tube in its 23-inch TV sets. As will be shown below, General Electric Company has also in the last two years begun to substitute the conventional tube in its TV sets to an undisclosed extent solely because the intrusion electron gun produces a better picture.

Returning now to the subject matter of the comparative longevity of the two types of picture tubes here under consideration, the record shows that the engineering staff of Admiral conducted extensive life tests on both the intrusion and conventional picture tubes. All tests were conducted for periods in excess of 1000 hours of playing but test results were taken at the end of 1000 hours of playing. The operation of a TV set for 1000 hours is roughly the equivalent of one year of normal use of a TV set in the home. The engineering staff of Admiral has set up certain predetermined life test standards to determine whether a picture tube after 1000 hours of playing passes or fails to pass these predetermined standards. At the end of 1000 hours of playing the tubes are measured for their cathode activity or more accurately stated for the rate of cathode emission from the electron gun. This measurement is compared with the aforementioned predetermined standards. The measurements are made by means of a meter.

Admiral engineers between January and June 1958 tested a total of 28 intrusion type picture tubes manufactured by Thomas Elec-

tronics and bearing the number 21CEP4A which is the standard identifying number for that picture tube in the industry. This group of 28 intrusion picture tubes were tested for their cathode activity at the end of 1000 hours of playing.

In the period between April and October 1958 Admiral also tested a total of 16 intrusion type picture tubes manufactured by the aforementioned National Video Corporation, one of respondent's regular suppliers of intrusion picture tubes. These 16 tubes bore the number 21DEP4 which is the standard identifying number for that picture tube in the industry. This group of 16 intrusion tubes were also tested for their cathode activity at the end of 1000 hours of playing.

The above relates to tests by Admiral on intrusion type picture tubes bearing different serial numbers than the serial numbers which identify the intrusion picture tubes used by respondents, to wit: 21CBP4 and 21CBP4A. (See Stip. of Facts, Par. 72) Identifying serial numbers are standard for the industry.

Admiral also conducted life tests on intrusion picture tubes bearing one of the two aforementioned serial numbers, to wit: 21CBP4. There were two such life tests by Admiral engineers on the 21CBP4. Each involved six tubes. These were also manufactured by Thomas Electronics but it is found from the record generally that on the longevity aspect, Thomas tubes were essentially the same as the tubes by the same number supplied to the respondent by Tung-Sol and National Video. The life tests on one of these groups of six intrusion tubes were commenced in June 1957 and the tests on the other group of six were started in March 1959. Each tube in the two tests—12 tubes in all—were measured by meter for their cathode activity at the end of 1000 hours of playing.

In addition to the above-described life tests on intrusion type picture tubes, Admiral also conducted life tests on two groups of conventional type picture tubes. One of these life tests, commenced in December 1958 and ended in April 1959, involved 15 conventional picture tubes. The other group of life tests, commenced in February 1959 and ended in July 1959, involved 18 conventional picture tubes. Each of the tubes in the two sets of life tests—33 picture tubes in all—were measured by Admiral engineers for their cathode activity at the end of 1000 hours of playing.

On the basis of the results obtained from measuring the cathode activity of both the intrusion and conventional types picture tubes involved in the above-described Admiral Corporation's life tests after the tubes had been each played for a total of 1000 hours, Admiral's picture-tube engineer, Raymond Magdziarz, by whom or under whose supervision the tests were made, rendered his expert

opinion that the intrusion type picture tube does not enjoy any advantage over the conventional type picture tube in the matter of longevity. It should be again noted that the measurements on which this opinion was made were by means of meters and did not involve any subjective judgments.

As aforementioned the second life test on the intrusion picture tube adduced by complaint counsel was that of the Rauland Corporation, a manufacturer of cathode ray tubes. Rauland since 1948 has been a wholly owned subsidiary of Zenith's. It has never manufactured for commercial sale the intrusion type picture tube although it has from time to time made experimental models of the intrusion tube. Rauland's production of the cathode ray picture tube is devoted exclusively to the manufacture of the conventional picture tube. Along with RCA and Sylvania, Rauland is one of the top three producers of the cathode ray picture tube. In addition to competing with RCA and Sylvania, Rauland competes with National Video, Tung-Sol and others and formerly with the aforementioned Thomas Electronics, now out of business.

Rauland launched a comparative life test study on the intrusion type picture tubes in February 1959 under the supervision of its quality assurance manager, Ralph K. Reichenbach, an electrical engineer, whose responsibilities also include the analysis of competitive products.

Involved in the life tests commenced in February 1959 by Rauland were (a) six intrusion type picture tubes, bearing the aforementioned standard serial number, 21CBP4, manufactured by National Video and also supplied to respondent and (b) six conventional style tubes manufactured commercially by Rauland. Rauland's standard procedure for life testing was used on the tests here under consideration. This procedure was described by Reichenbach as follows:

" This would be to test the tube initially for electrical characteristics. By this, we mean checking the emission on the tube, the gas vacuum, interelectrode leakages, all electrical characteristics. We would put the tube on light test, test it periodically during the life test, and then test the same characteristics after the test had been designated as completed. (Tr. 1051-1052)

Under the Rauland life testing procedure, checks are made every 96 hours of the various electrical characteristics of the tubes listed by Mr. Reichenbach in his above testimony. The results of these checks were plotted on a curve.

Rauland in the aforementioned tests commenced in February 1959 tested the aforementioned six National Video intrusion type tubes (*i.e.*, the same as used by respondent) and the six Rauland conventional type tubes in accordance with the Rauland life testing pro-

cedure described above. All test measurements at the end of each 96 hours of operation were by means of electrical meters; no subjective element of judgment went into these measurements. The life testing of the intrusion picture tubes was abandoned at the end of 588 hours of operation and the conventional tubes, at the end of 3000 hours.

Mr. Reichenbach concluded at the end of 588 hours²² of life testing the National Video intrusion tubes that they had no advantages in any of the electrical characteristics measured for over the Rauland conventional tubes. More specifically he concluded that the National Video intrusion tubes did not show any evidence of having a potential for longer life than the Rauland conventional tubes. On the contrary it was Mr. Reichenbach's opinion that the Rauland tube had a greater potential for longevity than the National Video intrusion type tube. These conclusions on the comparative longevity of the two types of tubes were reached on the basis of the curves plotted every 96 hours from measurements of the aforementioned electrical characteristics of the cathode ray tubes (both types) under study and on the further fact that one of the six intrusion tubes showed a slackening of cathode electron emission. This slackening did not occur in the remaining five intrusion tubes under test nor in any of the six conventional tubes under test. As heretofore noted, all measurements were made by means of electrical meters.

On the basis of the results of the described life tests, Reichenbach recommended to his employer, Rauland, that it continue the manufacture of the conventional picture tubes and that it not embark on the manufacture of the intrusion type picture tube. If decision had been made to convert the Rauland plant from the production of the conventional tube to that of the intrusion tube, the expenditure needed for the retooling required for such a change would have been fairly nominal, only a few hundred dollars.

The above concludes the life test evidence on the intrusion type picture tube adduced by complaint counsel.

As part of their direct proof, complaint counsel also elicited the expert testimony of Everett L. Craig of General Electric Company, an electrical engineer of long and wide experience in the field of electron tubes, particularly cathode ray tubes, commonly known as television picture tubes. At the time of the hearing, Mr. Craig was General Electric's design engineer in charge of electrical products.

²² See also testimony of Rauland's vice president in charge of research, Dr. C. Szegho, at Tr. 3701, for reasons showing no particular advantage in extending test beyond 588 hours.

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From Mr. Craig's testimony, it is found that General Electric started to use intrusion type tubes in their sets in the year 1960, but the extent to which the intrusion tube is used by that company is not disclosed by the record. But the record is clear that GE did not adopt the intrusion tube because of any belief on the part of its engineering staff that it had a superior longevity over that of the conventional tube but only because the intrusion picture tube produced a better quality picture. It will be recalled that Admiral also adopted the intrusion tube for the same reason but only in their larger or 23-inch television sets because it had found that while the intrusion tube produced a better picture in the 23-inch set, in the smaller or 19-inch TV set the conventional tube produced as good a picture as the intrusion tube.

Although GE has not made any comparative life tests on the intrusion and conventional picture tubes for the purposes of determining which of the two has the superior longevity, Craig testified that such differences as may occur between tubes of any types in the matter of longevity would be due to differences in care in the manufacturing process and not to basic design or tube type. (Tr. 1353-1354) Prior to the issuance of the complaint in this proceeding, GE engineers had occasion to analyze respondent's involved intrusion tube and reached the conclusion that it had no better longevity than the conventional tubes used by most of the industry as will appear from the following quotation of record from a letter addressed by GE to the Federal Trade Commission under date of October 7, 1960:

The General Electric cathode-ray tube department engineers analyzed the Motorola [intrusion] type tubes and found that they were the same in design from the standpoint of aperture sizes and spacing as those used by most of the industry. They will, therefore, have about the same reliability [longevity] and operating characteristics. (Tr. 1427)

As its defense in part, respondent offered two comparative tests on the intrusion and conventional picture tubes designed to show that respondent's intrusion type picture tube has a ten-fold life over the conventional picture tube, as claimed by respondent in its advertisements. Respondent's tests are different in character from those adduced by complaint counsel, as described above, and unlike the tests adduced by complaint counsel contain subjective elements of judgment. But as heretofore indicated, respondent appears to place its major reliance on theory to support its advertised claims that its intrusion type picture tubes last 10 times as long as the conventional picture tube.

One of the tests adduced by respondent may be called the Hilary Moss brightness test, or more simply the Moss test, after the name of the man who invented the test. It should be noted preliminarily

that the Moss test is not in any sense a "life test". "Life tests", it will be recalled, are actual "performance tests, sometimes accelerated, designed to simulate the useful lives of radio and television parts." (Stip of Facts, Par. 39) Essential to the understanding of the Moss test is respondent's aforementioned premise or theory that the intrusion gun by virtue of its supposedly higher penetration due to its above-described construction difference over the conventional gun can reach and utilize electrons from the outer borders of the cathode surface²³ beyond the reach of the conventional gun and by the use of these border electrons, supposedly not used by the conventional type picture tube, cause the intrusion type picture tube to have ten times the life of the conventional type picture tube.

The Moss test is simply a method devised to demonstrate *by visual means* whether there is a difference in the ability of various types of electron guns to reach electrons farthest removed from the center of the cathode. Respondent's chief television engineer agreed, in effect, that proof by such visual means that one type of electron gun, let us say Type A, pulls and gathers electrons from a greater area of the surface of the cathode than Type B does not in itself, however, constitute proof that a picture tube employing the Type A electron gun will actually outlast a picture tube using the Type B electron gun. The record shows that only an actual life test (*i.e.*, *performance test*) under controlled conditions can demonstrate whether one type of picture tube will outlast another. The sole value of the Moss brightness test is that it lends credence to the theory that various types of electron guns vary in their ability to reach the outer borders of the electron-emitting cathode. (Tr. 2417-2418)

The Moss brightness test is a simple but ingenious device for measuring the electron producing areas of a cathode by means of photographing the cathode in action or more accurately the image of the cathode while it is in action. Prior to such photographing the cathode is covered by a mesh, best imagined as the ordinary window screen with its uniform network of open spaces. When the active cathode is thus photographed, it shows light through the network of open spaces in the mesh. The center of the mesh always photographs the brightest and the further one gets away from the center, the less bright are the open spaces until they fade into darkness altogether.

Respondent presented in evidence a photograph (RX 47) of a cathode activated by a conventional electron gun and a second photograph (RX 48) of a cathode activated by one of its intrusion electron guns. Garth J. Heisig, respondent's director of television engineer-

²³ It will be remembered that the cathode is simply a metal alloy. Respondent in its proposed findings of fact describes the cathode as being "dime-sized", presumably having a flat surface.

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ing, testified that the only essential difference between the conventional and intrusion electron guns employed in the Moss photographic tests was the above-described protrusion of the "G-3" grid into the "G-2" grid in the intrusion gun; the aperture size of the two guns were the same. The photograph of the cathode activated by the intrusion gun shows nine fairly lighted square-shaped spaces in the mesh as against only five fairly lighted square-shaped spaces in the photograph of the cathode activated by the conventional gun. On the basis of this difference in lighted squares, Garth J. Heisig, respondent's director of television engineering, estimated that respondent's intrusion picture tube would have seven and a half times the life of the conventional picture tube, if the ratio of the squares were squared, and twenty times the life of the conventional tube, if the ratio of the squares were cubed. Two other of respondent's expert witnesses, the aforementioned Dr. Jacobs and Mr. Briggs, from their study of the two Moss test photographs, predicted, respectively, that the intrusion tube would have "roughly" or "at least" ten times the life of the conventional tube.

Although the lighted squares in the two Moss test photographs (RX 47 and RX 48) can be counted, the measurements of the degree of their brightness is a matter of subjective judgment as a light meter was not used to determine the relative brightness of the squares in each of the photographs. This subjectiveness of judgment was admitted by respondent's Mr. Heisig. (Tr. 2403)

The two Moss test photographs were prepared for use at the hearing a few days before the trial herein was commenced.

Respondent's Moss test photographs and the conclusions drawn therefrom by respondent's witnesses came in for some very sharp criticism in rebuttal testimony from complaint counsel's expert witness, Dr. C. Szegho, Rauland's vice president of research (cathode ray tube research chiefly) and a pioneer in the field of cathode ray tube research. Three of these criticisms will be noted. The first is stated as follows: For comparative testing of two types of tubes as in RX 47 and RX 48, it is imperative to have absolutely representative samples of each of the two tube types (conventional and intrusion.) This is virtually impossible because the manufacturing process, no matter how good, cannot produce a sample which is truly representative for the kind of fine comparative testing required in the Moss test photographing attempted by respondent. Dr. Szegho stated: "And there are many hundreds really reasons which make it doubtful that two-in-every respect identical tubes can be manufactured." (Tr. 3662.) Furthermore, Dr. Szegho testified that the two tubes tested in RX 47 and RX 48 are experimental tubes by virtue

of the fact, among others, that for purposes of the test, a 500 per inch mesh had to be welded on the face of the cathode in each of the two tubes (conventional and intrusion). With reference to such experimental tubes, Dr. Szegho testified:

I have made experimental tubes all my life, many, many thousands of them, and I can't truthfully testify that each time you are making one kind of a tube for one-of-a-kind, you can never predict the outcome. It is good to say that the same craftsmanship and the same care has been taken, the same materials have been used; nevertheless, it is almost certain that if you only make one or two tubes of a kind, they will not come out the same. (Tr. 3661)

In the two experimental tubes involved in RX 47 and RX 48, Dr. Szegho believes that almost inevitable differences in the application of the mesh to the cathodes could easily throw comparisons off. Dr. Szegho noted that respondent "had to weld a 500-per-inch mesh onto the cathode. How do we know that some oxide from the welding didn't remain in one case on the cathode? How do we know that the coating is the same so that the mesh laid on exactly the same way in both cases?" (Tr. 3661-3662) The Moss test, Dr. Szegho stated, is "very suitable if you use it in any *one* tube to establish how varying certain tube parameters in that tube would change the emissive area or the distribution of the emission area" but if the Moss test is used "to compare the emission or the distribution of the emission of two different guns, then this method is of questionable value" for the reasons indicated above. (Emphasis supplied.) (Tr. 3660-3661)

Another reason advanced by Dr. Szegho for the unreliability of the two comparative Moss tests as reflected in RX 47 and RX 48 is that in the procedure described by respondent's engineer, Heisig, for making the Moss test photographs, it was inevitable, in order to avoid shattering the tubes used in such tests, that the anode voltage in the Moss test be lowered to about one-third of the voltage of that used when a picture tube is operated as a picture tube and not as an electro-microscope as required in the Moss tests. Accordingly, Dr. Szegho stated that "he could not accept as valid his conclusions [respondent's Mr. Heisig] from this test [RX 47 and RX 48]" since Mr. Heisig by lowering the anode voltage to "approximately a third which it should be, he indeed did change the cathode loading for those conditions for which he made this test * * *". (Tr. 3659)

We will note only one more reason why Dr. Szegho deems the Moss test photographs as reflected in RX 47 and RX 48 to have doubtful validity and this is best given by Dr. Szegho in his own words:

HEARING EXAMINER BUSH: You differ from the conclusions drawn from Respondent's Exhibits 47 and 48, is that correct? Is that what you had in mind?

THE WITNESS: Yes.

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HEARING EXAMINER BUSH: Very well. You may proceed.

THE WITNESS: The conventional gun cathode image on Exhibit 47 is blurred, unsharp, and distorted. The cathode image of the intrusion gun is sharp. I count a different number of squares across the diameters, and from this I deduce, and also from the differing size of the squares, that the electro-optical magnification was slightly different when these two pictures were taken, and I submit that if this electro-optical magnification would have been the same, and if the image shown on Exhibit 47 of the conventional gun would have been sharp, then there is a slightly longer exposure of the image shown on Exhibit 47, the distribution across the diameter, the light distribution across the diameter would be indistinguishable.

I also note that on Exhibit 47 the image shows distinct limiting. You can see the outline of some obstructing gun parts, whereas in Exhibit 48, such limiting is absent. From this I also deduce that the electron-optical magnification was different.

In view of all this, I place very little stock into these exhibits. (Tr 3664-3666)

The above concludes the principal evidence presented on the Moss tests.

The only other test adduced by respondent in support of its representation that its intrusion picture tube would last ten times longer than the conventional picture tube is a "life test" commenced in 1957 and concluded in January 1958. Involved in this so-called life test were eight of respondent's intrusion type picture tubes, advertised by respondent as shown above as the "Golden M" picture tube, and eight conventional type picture tubes. All of the sixteen tubes used in the test were manufactured by and purchased from National Video.

Although the test is referred to in the testimony as a "life test", it was not a life test in the sense that the sixteen picture tubes were operated in TV sets until they failed from exhaustion or, to put it another way, until they were worn out.

The sixteen tubes were operated on and off for a total of 2000 hours under identical conditions. At the end of the 2000 hours the test was terminated. At that time all sixteen tubes were still functioning and producing pictures. However, at the end of 2000 hours of operation, the sixteen tubes were tested for their ability to meet new picture tube specifications. The primary purpose of the test was to determine tube degradation or tube decline after 2000 hours of playing. Tube degradation is manifested by a significant drop in electron emission from the cathode, or by detectable damage to the cathode, or by a combination of these two phenomena.

The results of respondent's life test on the sixteen picture tubes are shown in RX 49. Although this exhibit shows a number of things the tubes were tested for, it is established from the testimony of the Motorola engineer who conducted the test that the only sig-

nificant columns in the exhibit from the standpoint of tube longevity are the columns entitled "Brightness" and "'K' Image", which stands for "cathode image." (Tr. 2489,2495.) Through a process developed for looking at the image of a cathode in action, it can be determined visually whether there are any spots on the cathode. Spots on the cathode indicate damage to the cathode. The "'K' Image" column shows such damage spots if they have occurred. At the end of the 2000 hour test, respondent's engineers determined the "brightness" of each of the sixteen tubes by means of a light meter. Such measurements for brightness were objective measurements without any elements therein of subjective judgment. The determination of whether there were spots on the cathodes of the sixteen tubes and, if so, the size of such spots, was to a large degree subjective in nature.

As seen, one of the manifestations of the tube degradation is a significant drop in electron emission from the cathode in the picture tube. This in turn causes a drop in the brightness produced by a picture tube. A measurement of a picture tube's brightness is thus an indirect method of measuring the strength of the electron emission from the cathode in the tube.

As heretofore stated, respondent's engineers at the end of the 2000 hour test measured the brightness of each of the 16 tubes in the test *as against respondent's new tube specifications* for brightness. With respect to such brightness measurements, RX 49 shows that there were no failures in the sense of meeting new tube specifications in any of the eight intrusion or "Golden M" picture tubes involved in the test and that there were five failures in this sense among the eight conventional tubes involved in the test.

With respect to damage spots on the cathode, RX 49 shows that at the end of the 2000 hour test three of the eight Motorola "Golden M" picture tubes had damage spots and all eight of the conventional tubes had damaged spots.

Except for the above-described 2000 hour life test of 1958, respondent has not conducted any other life tests to substantiate its advertised claim that its "Golden M" intrusion type picture tube will outlast the conventional picture tube ten times. (Tr. 2489)

Respondent in January 1962 discontinued advertising that its intrusion picture tube had ten times greater life than the conventional picture tube. (See respondent's proposed findings of fact at footnote on page 63) The chief television engineer ascribed this to the increasingly wider use of the intrusion tube in the TV manufacturing industry. (Tr. 2452) The record shows that as late as the trial of this proceeding in mid-year 1962, Rauland, one of the three

top producers of the cathode ray tube and a cathode ray tube supplier to many TV manufacturing companies, was still manufacturing only the conventional picture tube. Rauland's parent company, Zenith, was in 1962 using the conventional tube principally. Similarly in 1962, Admiral was using the conventional picture tube in its popular priced 19-inch portable TV sets.

Respondent appears, as heretofore noted, to place its principal defense, not so much on its above-described Moss tests and life tests *per se*, but on the theory that its electron gun is able to reach electrons from the outer borders of the cathode which are missed by the conventional gun, and is thus able to have ten times the life of the conventional gun. Thus respondent in its proposed findings of fact (at page 65) states the issue as follows: "The contested issue is whether or not the intrusion or high penetration type electron gun is able to draw electrons from a greater area of the cathode's surface without increasing the size of the aperture, and thereby increasing reliability or life of the cathode without loss of picture quality. The theoretical explanation for its ability to do this is that because of its 'intrusion' feature, a high penetration of positive electrical force is directed through the aperture nearest the cathode where it pulls or draws electrons from a larger area of the cathode than a conventional gun with relative low voltage penetration." As seen, the Moss test was used by respondent in the photographs RX 47 and RX 48 not to serve as direct proof that the intrusion gun can outlast the conventional tube ten times but only as visual proof of the theory advanced by respondent's expert witnesses that the intrusion gun attracts electrons from wider surface areas of the cathode than the conventional gun.

In opposition to respondent's above-described theory, counsel supporting the complaint adduced expert testimony to show that in actual fact the theory did not hold up.

Preliminarily it should be noted that the expert witnesses for both sides agree that any device which will reduce "cathode loading" (*i.e.*, lower cathode current density, Tr. 3625), without affecting picture quality, would give a picture tube using such device a longer life than a tube which didn't have the device. But on the question of whether the intrusion gun will cause reduced cathode loading due to its alleged higher anode penetration and thereby greater geographical use of the cathode's electron emitting surface area, the experts for the respective parties herein are in total disagreement.

Complaint counsel developed its defense in opposition to respondent's theory both by cross-examination of respondent's expert witnesses and by rebuttal testimony. Primary reliance, however, was

placed on the rebuttal testimony of aforementioned Dr. Szegho. Dr. Szegho is a pioneer in research on the cathode ray tube, having served as an associate of John Logie Baird of London, England who is generally recognized as the "father of television". Dr. Szegho's entire professional career, commenced in 1933, has been devoted primarily to research on the cathode ray tube. He has been associated with the aforementioned Rauland Corporation, one of the largest manufacturers of cathode ray tubes, since 1942. From 1942 to 1951, he was Rauland's director of research, and from 1951 to the present time, he has been Rauland's vice president in charge of research.

It will be our purpose here to highlight Dr. Szegho's rather lengthy and exhaustive but unfavorable analysis of respondent's theory. One of the first things pointed out by Dr. Szegho in his testimony is that a scientific article, based on the work of the aforementioned Hilary Moss and offered in evidence (RX 57B) by respondent in substantiation of its claim that its intrusion gun by reason of its alleged greater anode penetration reaches a larger surface of the cathode, does not in fact contain any such statement. On the contrary, Dr. Szegho showed that the involved article by Dr. Aurelius Sandor, of the General Telephone & Electronics Laboratories, states that the effective emitting area of emission of the cathode surface is dependent upon factors other than anode penetration and is in fact independent of anode penetration. (Tr. 3622-3623.) Since, according to the Sandor article, anode penetration plays no part in the more efficient use of the emitting electrons from the surface of the cathode as claimed by respondent, then it follows, Dr. Szegho testified, that there will be no difference between the intrusion and conventional types of electron guns with respect to longevity. (Tr. 3623)

Dr. Szegho also testified that the anode penetration of an electron gun was dependent upon the size of the aperture or hole in the gun facing the cathode. (It will be recalled that the electrons are drawn from the cathode surface through this aperture in the electron gun.) The larger the aperture, the easier it is for the gun to reach larger surface areas of the cathode. Testimony from sources other than Dr. Szegho shows that most cathode ray tube manufacturers limit their apertures to diameters of $\frac{1}{8}$ th of an inch because experience has shown that a larger aperture has an adverse effect on picture quality. Zenith, however, uses a larger aperture with no adverse effect on picture quality due to the special "low-condensation feature" of its tubes. Dr. Szegho pointed out that due to this special feature the conventional tube put out by his company, has an aperture so

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much larger than the aperture in respondent's intrusion type tube that his company's conventional tube will reach an emitting area in the cathode 2.6 times as large as that reached by respondent's intrusion gun. Under respondent's theory, this would mean, he testified, that the Rauland conventional picture tube would have an emission life (*i.e.*, picture tube life) between $6\frac{1}{2}$ to 18 times as long as respondent's intrusion gun. Although the witness did not carry through with this thought in his testimony, it is obvious that he meant that neither he nor his company makes any such claim. (Tr 3624-3628)

Dr. Szegho testified, as had General Electric's design engineer Craig (Tr. 1353-1354), that manufacturing procedures far overshadow the factor of anode penetration in the matter of tube longevity. (Tr. 3744) He further testified that tube exhaustion causes only a small amount of set failures. He was of the opinion, as were witnesses from Admiral and General Electric, that all tubes on the market, regardless of type, have about the same tube life.

DISCUSSION AND CONCLUSIONS

A review of the evidence shows that respondent is relying on (1) theory and on (2) its 2000 hour life test of 1958 to substantiate its advertised claim that its "Golden M" intrusion picture tube has a ten times longer life than the conventional picture tube. It is not here deemed necessary to restate respondent's theory as it has been stated a number of times above.

The examiner is of the opinion that theory can never serve as a verification for a flat statement of fact, such as is involved in respondent's representation of superior life for its "Golden M" picture tube. The error of using a theory as proof of an asserted fact is here compounded by the fact that the theory advanced by respondent is shown to be fallacious by a scientific article introduced into the record by respondent itself. We are here referring to Dr. Sandor's article in RX 57B. (Tr. 3622-3623.)

Similarly, respondent's 2000 hour life test of 1958 on eight of its "Golden M" picture tubes and eight conventional picture tubes cannot be accepted as valid proof of respondent's advertised claim that the "Golden M" tube will outlast the parent conventional tube ten to one. For one thing, the results of this test cannot be accepted because far more numerous tests by Admiral, involving many more conventional and intrusion type tubes, showed there was no difference between the two types of tubes with respect to reliability or longevity. The Admiral tests were made at times long prior to the

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issuance of the complaint herein. A similar test by Rauland engineers confirms the Admiral test results, not the respondent's life test results. But of even greater importance is the fact one of respondent's major suppliers of the "Golden M" picture tube, National Vidio, through its vice president of engineering and research, has stated that there is no difference in reliability or longevity between any of the tubes produced in its factory, including the "Golden M" and conventional picture tubes.

The record shows that the manufacturers of the "Golden M" tube made available to all of respondent's competitors essentially the same intrusion picture tube as the "Golden M", but that as far as the present record shows only respondent saw fit to advertise that it had a tube which was "10 times more reliable than ordinary picture tubes." This advertisement commenced in 1959 was continued to January, 1962 when it was discontinued. (See footnote at page 63 of respondent's proposed findings of fact.)

It is inconceivable that any of the large TV manufacturers in an industry as competitive as theirs would allow themselves to be out-classed by a competitor in the matter of long-life picture tubes when that competitor's picture tube was equally available from suppliers to all TV set manufacturers and in fact sold to a number of respondent's competitors. The evidence shows that such increase in the use of the intrusion picture tube in the industry as has taken place in recent years has been due to the intrusion tube's ability to produce a better quality picture in the larger TV sets and not to any superior life factor. Rauland's Dr. Szegho, however, declines to believe that the intrusion tube produces a better picture. Retooling for the intrusion tube would present no problem for Rauland from a capital expenditure point of view as the cost of such retooling would be only a few hundred dollars. Rauland continues to manufacture the conventional picture tube because its research convinces it that its conventional picture tube is the superior tube with respect to longevity and other factors.

The examiner rejects as lacking in probative value the evidence adduced by respondent to substantiate its representation that its "Golden M" intrusion picture tube has superior longevity to that of the conventional tube. The weight of the evidence compels the finding and conclusion that in the matter of longevity there is no essential difference between the two types of picture tubes.

ULTIMATE CONCLUSION OF FACT

The examiner finds that respondent's representation that the picture tubes contained in certain of its receivers were constructed to

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last 10 times longer than comparable picture tubes is false, misleading, and deceptive.

8. *"First Tuner" Issue*

The complaint charges that respondent has falsely represented that:

Its Custom-Matic Tuner contained in certain of its receivers was the first tuner specifically designed for remote control.

Respondent admits that it made the above representation but denies that it is false, deceptive or misleading.

The representation was made in advertisements published in 1959.

The record conclusively shows that respondent's "Custom-Matic Tuner" was not the first remote control tuner on the market. This is acknowledged by respondent in its proposed finding of fact (at page 74) as follows:

In 1959, when respondent made the alleged representation, remote control television receivers had been on the market for many years. Respondent itself had had a remote control television receiver since 1956.

There is thus considerable justification for the following rather emphatic statement made by counsel supporting the complaint in their reply brief (at page 55 with supporting references to the record):

There is absolutely no question that respondent's representation that the Custom-Matic Tuner was the first tuner specifically designed for remote control is literally false.

Respondent's defense, however, is that the phrase in its above-quoted representation reading "specifically designed for remote control" requires an interpretation of the representation which would not be false to the buying public. Respondent contends that prior to 1959 when it made its said representation, all remote control tuners on the market were merely adaptations of the then existing manual tuners located in the TV chassis itself. A tuner, whether it be of the manual or remote type, is defined as that component of a TV receiving set which "receives the signal from the antenna, selects it, amplifies it and converts it to a common frequency to be acted upon by other parts of the receiver." (See respondent's proposed findings of fact at page 74.)

Respondent argues that its Custom-Matic (remote) Tuner was not an adaptation of any existing manual tuner, but was a completely new development in the TV industry and in that sense was the "first tuner specifically designed for remote control".

Respondent thus seeks an interpretation of the phrase "specifically designed for remote control" in the light of the *internal history* of electrical engineering in the development of remote control tuners.

This interpretation is rejected as there is nothing in respondent's representation which would lead a prospective consumer to make such an interpretation of the representation.

The examiner finds from his examination of the advertisements here in question that they constitute representations that the Custom-Matic remote control tuner was the first remote control tuner to be placed on the market. It is the examiner's opinion and finding that this is the reading of the advertisements that most prospective customers would give to the advertisements. As heretofore noted in connection with other issues, it has long been established that the meaning of an advertisement can be established from the advertisement itself. *Zenith Radio Corp. v. Federal Trade Commission, supra*. As respondent agrees that its Custom-Matic Tuner was not the first remote control tuner placed on the market, the representation that it was, is false.

If there is any ambiguity in respondent's representation, it is resolved against the respondent and favorable to the aim of the Federal Trade Commission Act to bar "unfair or deceptive acts or practices in commerce". The Supreme Court many years ago held in connection with a violation of a similar act (*i.e.*, Food and Drug Act of June 30, 1906) that: "* * * Deception may result from the use of statements not technically false or which may be literally true. The aim of the statute is to prevent that resulting from indirection and ambiguity, as well as from statements which are false. It is not difficult to choose statements, designs and devices which will not deceive. Those which are ambiguous and liable to mislead should be read favorably to the accomplishment of the purpose of the act. * * *". *United States v. 95 Barrels of Vinegar*, (1923) 265 U.S. 438, 443. See also *Rhodes Pharmacal Co., Inc. v. Federal Trade Commission*, 208 F. 2d 382, 387 (CA-7, 1953).

As noted above, respondent is seeking an interpretation of the involved representation to the effect that its Custom-Matic Tuner was a completely new development in the industry and in that sense was the "first tuner specifically designed for remote control". Even if this interpretation of the representation is accepted, the record shows such a representation would also be false. The testimony of a Zenith engineer shows that Zenith TV sets as early as 1950 were "specifically designed for remote control". (Tr. 869 et seq.) This was at least eight or nine years prior to the development of respondent's "specifically designed for remote control" Custom-Matic remote

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control tuner. Similarly, Philco and Admiral came out with remote control tuners many years before respondent's Custom-Matic with such important changes therein from Philco's and Admiral's manual tuners that their respective remote control tuners must be regarded as being "specifically designed for remote control". (Tr. 771 et seq., 773, 1032-1034) Ironically, although respondent claims that its Custom-Matic Tuner was "specifically designed for remote control", the testimony of respondent's chief of television engineering shows that the Custom-Matic Tuner was also used in Motorola TV sets which did not have remote control tuning. (Tr. 2811)

CONCLUSION

The examiner finds that respondent's representation that its Custom-Matic Tuner contained in certain of its receivers was the first tuner specifically designed for remote control is false, misleading and deceptive.

9. "*Never Requires Fine Tuning*" Issue

The complaint charges that respondent has falsely represented that:

Its Custom-Matic Tuner contained in certain of its receivers never required fine tuning.

The aforementioned term "fine tuning" is best defined by one of respondent's ads which reads as follows:

NEW LONG DISTANCE CUSTOM-MATIC TUNER NEVER REQUIRES
FINE TUNING WHEN CHANGING FROM CHANNEL TO CHANNEL

Before the introduction of this new Motorola tuner, you had to fine tune each channel *every* time you changed channels in order to get maximum performance. The new Motorola Custom-Matic Tuner ELIMINATES this. Now, you fine tune a station *just once* with the special oscillator control (explained below) and the station is *permanently fine tuned* * * * no further adjustment required.

Select station with station selector. Push in fine tuning control until it engages tuner. Then with control still engaged, rotate it until you get the best picture and sound * * * release control and you have automatically locked channel to best picture and sound permanently. Repeat this for every channel in your area and you never again need to fine tune your set. (Emphasis as in ad.) (CX 49 A)

The charge here under consideration was based on advertisements by respondent of which the above is typical. Other advertisements in which the same claim of "never requiring fine tuning" is made are shown below:

(1) Tune each channel just *once* and TV stays fine-tuned for good! (Emphasis as in ad.) (CX 32 and 56)

(2) One simple adjustment lets *you* fine-tune stations permanently! (Emphasis as in ad.) (CX 41)

Under the amendment to its answer to the complaint, respondent has entered a qualified denial of the charge here under consideration as against the flat denial in its original answer. As the pleadings now stand, respondent denies it directly or indirectly represented that its Custom-Matic Tuner never required tuning *except* that it admits it represented that its said tuner never required fine tuning "as you go from station to station".

Similar to the situation on the previous issue, we are here also presented with a question as to the proper interpretation of the representation made in the various advertisements on which the charge under consideration is based. The parties are in disagreement as to the interpretation to be given to the word "never" in respondent's advertisements. The precise question is whether the advertisements under consideration constitute representations that respondent's Custom-Matic Tuner never requires fine tuning under any and all circumstances, both internal and external to the tube. A decision on this question will be deferred until after the findings of fact have been set forth on the conditions or circumstances which require readjustments of the original "fine tuning".

In the presentation of their case-in-chief on the involved charge, counsel supporting the complaint offered no testimony in support of the charge but chose instead to rely on a stipulation of facts for the establishment of the charge. In their proposed findings of fact, complaint counsel have expanded this to include reliance on testimony given on direct examination by respondent's aforementioned Mr. Heisig, its chief of television engineering, the only witness called on the issue by respondent.

The stipulation relied upon by complaint counsel reads as follows: "There may be a need for periodic adjustment of fine tuning of the 'Custom-Matic Tuner' in 1960 Motorola television receivers as the set ages and because of changing conditions external to the set." (Stip. of Facts, Par. 74) Complaint counsel also relies on the direct testimony of respondent's Mr. Heisig which establishes that fine tuning of respondent's Custom-Matic Tuner would be necessary due to changes in the location of a transmitter or television antenna, changes in the power of a transmitting station, and deterioration due to aging. (Tr. 2835-2836) From Mr. Heisig's testimony, it also appears that the Custom-Matic Tuner may initially require more than one adjustment by the TV set owner before he obtains the picture focus and quality he desires. Complaint counsel urges this fact as evidence against respondent's claim that its described tuner "never

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requires fine tuning". This argument is rejected as the examiner is convinced and finds from his study of the involved advertisements that the average consumer would expect that a certain amount of adjustment would be required before he could find the picture quality he wanted to lock in, notwithstanding such language in respondent's advertisement as in the above noted statement, to-wit: "Tune each channel just once and TV stays fine-tuned for good!"

Respondent's defense (see respondent's proposed findings of fact at page 79) is that the involved charge of the complaint as set forth above has been amended by a paragraph in the parties' stipulation of facts to read as follows:

Through the use of the statements contained in Paragraph Four of the Complaint, respondent has represented directly or by implication that: (d) * * * its "Custom-Matic Tuner" contained in certain of its television receivers * * * never required fine tuning as you go from station to station * * *. (Stip of Facts, Par. 30 (d))

The examiner rejects the contention that the above stipulation constitutes an amendment of the charge of the complaint here under consideration. As contended for by counsel supporting the complaint, it is found that the said stipulation is a partial admission of the representation charged by the complaint. This admission is formalized by respondent's "Amendment to Answer" filed on August 1, 1962, in which, as heretofore noted, respondent modified its original denial that it had made the representation charged in the complaint to a partial admission that it had represented that its Custom-Matic Tuner "never required fine tuning as you go from station to station". (It should be noted that the Stipulation of Facts was filed on July 9, 1962, as part of the "Hearing Examiner's Memorandum of Results of Pre-hearing Conference herein" whereas the respondent's "Amendment to Answer" was filed as noted above on August 1, 1962.)

With these findings of fact on the conditions or circumstances under which readjustments will be required of the original locked-in fine tuning, we return to the question of whether the advertisements under consideration constitute representations that respondent's Custom-Matic Tuner "never" requires fine tuning under any and all circumstances, both internal and external to the tube.

From the examination of the advertisements and the relevant evidence of record, it is found that the advertisements do not constitute a representation that TV sets containing the Custom-Matic Tuner would not have to be retuned because of conditions external to the set, such as changes in the location of a transmitter or television antenna and changes in the power of a transmitting station. The examiner finds that most consumers, including buyers less sophisti-

cated than the average, would not read into respondent's ads a representation that the Custom-Matic Tuner would not have to be retuned in the event of such described conditions external to the TV set itself.

With respect to the changes required in the original locked-in fine tuning of respondent's TV sets equipped with the Custom-Matic Tuner by reason of conditions internal to the TV set, such as deterioration due to aging, the situation is quite different. With respect to such internal changes, it is found that the advertisements in question do constitute a representation that no retuning of the original locked-in fine tuning would ever be required. The examiner finds that a significant portion of the consuming public would judge the advertisements to constitute a representation that once the original fine tuning had been locked-in by the Custom-Matic Tuner, the TV set would never require retuning due to any conditions internal to the set. *Zenith Radio Corp. v. Federal Trade Commission, supra.*

CONCLUSION

The examiner finds that respondent's representation that its Custom-Matic Tuner contained in certain of its receivers never required fine tuning is false, misleading and deceptive.

10. "4-Wafer Cascode Tuner" Issue

The complaint charges that respondent has falsely represented that:

Its 4-Wafer Cascode Tuner contained in certain of its receivers was the only tuner that turned out a stronger signal than the one it picked up.

In its proposed findings of fact, respondent admits that it made the above representation and that the representation is "literally false", but interposes a defense on the ground that "there is no evidence in the record that the average consumer understands what a tuner is, how it operates, or what he expects from 'the only tuner that turns out a stronger signal than the one it picks up.'" Respondent requests a dismissal of the charge on the ground that it has not been proven that respondent has made a meaningful and material false statement.

While it is, of course, true that there is no consumer testimony in the record on the meaning to consumers of the above-stated representation, this presents no problem because the language and message contained therein are sufficiently clear as to pose no problem of interpretation. The representation in fact appears self-explanatory. It is extremely doubtful that respondent would have authorized the ads which gave rise to the charge unless it was satisfied that they carried

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a message which would help sell the advertised product. As noted in other issues, the interpretation of an advertisement may be made from the advertisement itself. *Zenith Radio Corp. v. Federal Trade Commission, supra*. Although it is believed that the involved representation is self-explanatory, an elaboration can be made. For one thing, it is found that respondent represented that its described tuner could turn out a stronger signal for the benefit of the listener than the original signal the tuner received from the transmitting station. Secondly, it is found that respondent represented that its said tuner was the *only* tuner in the market that could do that. These representations of fact, contrary to the contention of respondent, are both meaningful and material. The falsity of these representations are now admitted by respondent.

CONCLUSION

The examiner finds that respondent's representation that its 4-Wafer Cascode Tuner contained in certain of its receivers was the only tuner that turned out a stronger signal than the one it picked up is false, misleading and deceptive.

11. "*Completely Hand-Wired Chassis*" Issue

The complaint charges that respondent has falsely represented that:

Its 1960 television receivers represented the only television line with completely hand-wired chassis.

As there is a dispute between the parties as to the meaning of this representation, an analysis of the advertisement in which the representation was made is set forth below.

The basis for the charge here under consideration is an elaborate eight-page advertisement in an unspecified fall 1959 issue of *Life* magazine introducing respondent's 1960 model TV sets. The same spread was also republished as a Supplement to the October 15, 1959, issue of *Home Furnishings Daily*, a daily trade newspaper. A copy of the eight-page advertisement is in the record as CX 54 A-H.

A stipulation by the parties (Stip. of Facts, par. 24) that the above advertisement was disseminated "on one occasion only—on October 15, 1959, in a special supplement to the trade publication, *Home Furnishings Daily*" is rejected because the advertisement as reflected in CX 54 A-H shows on its face that the ad was published in both *Life* magazine and the *Home Furnishings Daily*. The parties were accordingly in error in their stipulation.

Although the week of the publication of respondent's said advertisement in *Life* magazine is not shown in RX 54 A-H, it is found

that the ad in *Life* magazine was published either shortly before or shortly after the ad made its appearance as a Supplement to the October 15, 1959, issue of *Home Furnishings Daily*.

The front and last pages of the advertisement are in color. (See CX 54 A and H.)

In a box on the top of the front page of respondent's *Life* advertisement are the words:

INSIDE STORY OF THE MOST RELIABLE TV EVER

A CLOSE-UP OF EXCLUSIVES

IN THE ONLY TV LINE WITH COMPLETELY
HAND-WIRED CHASSIS AND TUNER

(Underscoring as in ad. CX 54 A.)

The center and largest portion of the front page of the *Life* magazine advertisement is devoted to what appears to be a factory scene at a Motorola plant depicting the handwiring of a Motorola chassis and tuner. Included in the picture is a young woman factory worker engaged in hand wiring a TV chassis. At her left is a picture of Mr. Heisig, respondent's chief of television engineering. Mr. Heisig is holding a tuner in one hand and pointing to it with a pencil in the other hand. At the bottom of the picture are the words: "Engineer Garth Heisig: 'Yes, Even the tuner is hand-wired.'"

Across the bottom of the front page of the ad is a brilliant red border about an inch and a half wide. Inscribed in white on this red border are the words "Motorola TV—1960".

The second page of the ad is devoted almost entirely to a picture of a Motorola TV chassis, with back removed, aimed at showing that the chassis is hand-wired, rather than printed.

The top half of the third page is devoted to an explanation as to why a "completely hand-wired chassis" gives "peak performance" and "the ultimate in reliability". The explanatory message reads in part: "Motorola engineers made exhaustive field tests and laboratory examinations of even well-designed TV sets * * * Their decision: printed circuitry sets fail to measure up to the standards of performance, reliability, uniformity and freedom from costly maintenance problem we feel Motorola customers are entitled to * * *."

The bottom half of the third page is devoted to respondent's explanation of why in its TV sets "Even the Tuner (most critical part of every TV set) is Hand-Wired". The text of the ad beneath this caption reads: "The way we figure it, the place where the signal first comes into a TV set had better be as foolproof and trouble-free as we could possibly design and build it. Here, too, hand-wiring was the one sure way to get the results we wanted. So * * * Motorola goes all the way * * * with a hand-wired tuner in every model."

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Pages 6 and 7 of the ad carries photographs of 27 different 1960 model Motorola TV sets, each of which is identified by model number. This was intended to show only part of respondent's 1960 line of TV sets as the bottom of page 7 states that there are: "More than 58 *different* models to choose from with handsome cabinets in *every* styling imaginable * * *." (Emphasis as in ad.)

The key sentence in respondent's said *Life* magazine advertisement on which the charge here under consideration is based is the one appearing on the top of page 1 therein which is here repeated for the convenience of the reader:

A CLOSE UP OF EXCLUSIVES IN THE ONLY TV LINE
WITH COMPLETELY HAND WIRED CHASSIS AND TUNER ²⁴

(Underscoring as in ad.)

The parties are in disagreement as to the interpretation to be given to the above key sentence in the ad. Counsel supporting the complaint contend that the sentence must be interpreted, as charged in the complaint, as a representation that respondent's 1960 line of television receivers was "the only television line with *completely* hand-wired chassis" (emphasis supplied), or, put another way, that respondent represented that its *entire* 1960 line of TV sets consisted *solely* of TV sets with hand-wired chassis.

Respondent, on the other hand, contends that the ad merely means that respondent had the only TV sets in which *both* the chassis and tuner of each set were hand wired. Respondent's contention in its own words in this connection is as follows: "Both Heisig (R. 2857) and Farris (R. 1463), respondent's Director of Advertising, explained that at the time the advertisement was published respondent's competitors' TV sets had handwire chassis but their tuners contained printed circuitry; that respondent's advertisement was intended to inform the reader that respondent had the only TV sets which were completely handwired, in both the chassis *and the tuner*." (See respondent's proposed findings of fact at pages 83 and 84.)

This disagreement between the parties as to the message or representation conveyed by the advertisement in question can be resolved by an analysis of the advertisement itself and a consideration of other relevant evidence in the record that would aid in its interpretation. *Zenith Radio Corp. v. Federal Trade Commission, supra*.

An analysis of the advertisement under consideration compels the finding and conclusion that respondent represented in its advertise-

²⁴ The above statement is shown as "typical" of respondent's advertisements in connection with the involved issue in "PARAGRAPH FOUR D" of the complaint. Respondent and complaint counsel agree that this statement is the key one. (See respondent's proposed findings of fact at page 83 and complaint counsel's reply brief at page 60.)

ment that its *entire* 1960 line of TV sets consisted exclusively of TV sets in which *both* the chassis and the tuner were hand-wired. This particularly follows from the following partial quotation from the aforementioned key sentence in the advertisement:

* * * THE ONLY TV LINE WITH COMPLETELY HAND-WIRED CHASSIS AND TUNER (Underscoring of words "And Tuner" as in advertisement; underscoring of "completely" added for emphasis.)

The above interpretation is implemented by other contents of the advertisement. Practically all of the second page of the advertisement is devoted to a portrayal of a hand-wired chassis. The whole tenor of the first three pages of the ad is to emphasize the hand wiring of respondent's TV chassis and tuner. The third page sets forth the reasons given by respondent for its decision to hand wire both the chassis and tuners of its TV sets.

The upper part of page 3 is devoted to a showing that a hand-wired chassis is superior to a printed chassis and although there is no direct representation therein that all of respondent's 1960 model TV sets have hand-wired chassis, the implication is clearly made that each and every set in respondent's 1960 line is hand-wired. The lower part of the same page expressly states that the tuner in "every" model is hand-wired. We quote again from the contents of page 3 of the ad: "So * * * Motorola goes all the way * * * with a hand-wired tuner in every model". The phrase therein "Motorola goes all the way" carries the clear and unmistakable implied representation that *every* chassis as well as every tuner in respondent's 1960 TV line is hand-wired.

The examiner's interpretation of the advertisement is thus broader than the charge of the complaint which merely charges that the respondent represented that its chassis are hand-wired but this interpretation is in no way in conflict with the charge of the complaint.

Respondent's contention that the advertisement be interpreted to mean merely "that respondent had the only TV sets which were completely hand-wired, in both chassis and the tuner" is rejected because the advertisement clearly indicates a representation that each and every TV set in respondent's 1960 line had a hand-wired chassis and tuner.

It is found that respondent's representation that each and every model TV set in its 1960 line had a hand-wired chassis was not literally true because by stipulation of the parties (Stip. of Facts, par. 28), it is established that respondent on October 15, 1959 had and was offering for sale under the Motorola trade mark a TV set with a plated circuit rather than a hand-wired chassis, identified as its Model 17P6. This was on the very day that respondent's above-

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described, eight-page *Life* magazine advertisement was reproduced as a Supplement to the *Home Furnishings Daily*. (The eight-page advertisement, it will be recalled, is in the record as CX 54 A-H.)

Other pertinent facts with respect to respondent's said plated circuit TV Model 17P6 are these. It is a 17 inch so-called portable model. Although another portable model TV set bearing a closely similar model number, Model 17P5 is illustrated in CX 54, the plated Model 17P6 is not shown or referred to in CX 54.

The Motorola Model 17P6 was the only model in respondent's 1960 line of some 58 models which did not have a hand-wired chassis. The plated circuit Model 17P6 was discontinued about a year after its introduction to the market.

Respondent went to great advertising expense to promote the sale of the plated-circuit Model 17P6 as the model was made the subject of an eight-page magazine spread in an unspecified fall 1959 issue of *Life*. The same spread was also republished as a Supplement to the October 20, 1959 issue of *Home Furnishings Daily*, a copy of which is in the record as RX 1 A-H.

The eight-page *Life* ad (RX 1 A-H) prominently features the plated chassis of the Model 17P6 as "New engineering design * * * Revolutionary new manufacturing technique." Page 4 of the ad reads: "Heart Of This New Concept Is Motorola's History-Making Plated Chassis—Color Coded On Both Sides." Page 5 shows a large picture of the "Color-Coded Chassis".

Page for page, respondent gave its new single-model plated TV set as much advertisement space in *Life* and *Home Furnishings Daily* (RX 1 A-H) as it had to the prior announcements in the same media (CX 54 A-H) of its hand-wired *entire* 1960 line of TV models.

In the light of the above complex of facts, the question is whether such facts show "acts and practices" by respondent which are "to the prejudice and injury of the public and of respondent's competitors and constituted, and now constitute, unfair and deceptive acts and practices and unfair methods of competition in commerce, in violation of Section 5 of the Federal Trade Commission Act", as alleged in the complaint.

The examiner finds it difficult to believe that any prospective purchaser, be he ever so naive, would be misled into buying the highly proclaimed plated-chassis Motorola Model 17P6 under the belief that he was getting a handwired chassis TV set because of the representation in respondent's advertisement (CX 54 A-H) that every model in respondent's 1960 line of TV models was hand-wired.

Similarly it is difficult to see how any of respondent's competitors could possibly suffer any injury or damage from the fact that among

the 58 or more Motorola TV models which respondent advertised as its 1960 line of TV sets and represented as being all hand wired there was one which had a plated chassis when that very plated model was prominently advertised and featured as a plated model TV.

CONCLUSION

Although respondent's representation in CX 54 A-H that its entire 1960 line of more than 58 TV models contained hand-wired chassis is not wholly true due to the presence in such 1960 line of a single separately and prominently advertised plated-chassis TV model, the examiner finds that the said representation did not result in prejudice and injury to the public and of respondent's competitors and did not constitute, unfair and deceptive acts and practices and unfair methods of competition in commerce, in violation of Section 5 of the Federal Trade Commission Act. Accordingly the charge here under consideration will be dismissed.

12. *"Picture Power and Video Drive Voltage" Issue*

The complaint charges that respondent has falsely represented that:

All sets in its 1960 television line were equipped with 20,000 volts of picture power and 180 volts of video drive.

Respondent in its amended pleadings admits that not all of its 1960 line of television receivers were equipped with 20,000 volts of picture power and 180 volts of video drive.

It is found from the testimony of respondent's witnesses on the issue here under consideration that all of respondent's 14- and 17-inch TV sets in its 1960 line had less than 20,000 volts of picture power and less than 180 volts of video drive, and that the combined sale of such 14- and 17-inch TV sets represented 13.8 percent of respondent's total TV set sales. It is also found from such testimony that certain of respondent's 1960 model 21-inch sets did not have 180 volts of video drive and that only the standard and deluxe portion of the 1960 Motorola line contained 180 volts of video drive. (Tr. 1469 et seq.; Tr. 2858-2863.)

Respondent interposes a defense to the involved charge on the ground that the advertisement which gave rise to the charge cannot be interpreted to mean that respondent represented all of its 1960 model TV sets to have 20,000 volts of picture power and 180 volts of video drive, but must be interpreted to mean that only part of respondent's 1960 line of TV sets was represented as having these features. We must accordingly turn our attention to the advertisement which gave rise to the charge.

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A copy of the advertisement in question is reflected in CX 54 A-H. As shown in the previous issue, CX 54 A-H is a reproduction of an eight-page advertisement by respondent in an unspecified fall 1959 issue of *Life* magazine as republished as a Supplement to the October 15, 1959 issue of *Home Furnishings Daily*.

The pages of CX 54 which are pertinent to the issue here under consideration are pages 4 and 5 which are marked CX 54 D and 54 E. Clear across the very top of pages 3 and 4 which when open lie adjacent to each other is a line of reading material which reads as follows:

ALL ACROSS THE LINE THE MOST * * * inside.

On page 4 directly beneath part of the above-described top line of reading material appears the following:

Exclusives	Picture of
in the	hand-wired chassis
hand-wired	
chassis	

Beneath the above on page 3 appears the following:

Finest combination of picture-making features in TV today [This line appears in large type.]

—20,000 VOLTS OF PICTURE POWER puts a brighter picture on the screen

* * * * *

—180 VOLTS OF VIDEO DRIVE to give picture greater contrast

Turning now to page 5 of the advertisement, the following appears directly beneath a portion of the aforementioned top line which as shown spans the width of both pages 3 and 4 (i.e., "All Across The Line The Most * * * inside"):

Exclusives	Picture of
in the	hand-wired tuner
hand-wired	
tuner	

Beneath the above appears the following:

—the first tuner specifically designed
for remote control

Motorola's exclusive new long-distance Custom-Matic Tuner employs the First Frequency Controlled Oscillator Tube ever used in TV. Never requires fine tuning as you go from station to station.

Picture of
New Golden
Satellite IV
Remote Control

Respondent argues in support of its contention that the above advertisement does *not* represent that all of its 1960-TV sets have 20,000 volts of picture power and 180 volts of video drive as follows:

Complaint counsel's interpretation would discard "the most inside" so as to leave an incomplete statement; he would then complete it by jumping down the page of advertisement to the voltage figures. Thus, respondent's voltage claims would appear as a reference to *all* sets in the line. (Emphasis as in respondent's proposed findings of fact, see page 86.)

Although respondent makes reference to the advertisement's phrase "the most inside", it does not anywhere attempt to explain what it believes the phrase would mean to a prospective purchaser. The examiner in an effort to see if other portions of the involved advertisement carried representations of lesser voltages in portable TV sets has carefully examined the reading matter under seven pictures of respondent's "portable and table model" TV sets (presumably the 14- and 17-inch sets which the evidence shows have less than 20,000 volts of picture power and 180 volts of video drive) illustrated on pages 6 and 7 of CX 54 and finds that there is nothing in such reading matter relating to the picture power or video-drive voltage.

The examiner finds that the sentences in the advertisement here involved reading as shown above:

Finest combination of picture-making features in TV today
 —20,000 VOLTS OF PICTURE POWER puts a brighter picture on the screen

* * * * *

—180 VOLTS OF VIDEO DRIVE to give picture greater contrast

unmistakably represents that each and every TV set in respondent's 1960 line of TV sets has 20,000 volts of picture power and 180 volts of video drive. *Zenith Radio Corp. v. Federal Trade Commission, supra.*

CONCLUSION

The examiner finds that respondent's representation that all sets in its 1960 television line were equipped with 20,000 volts of picture power and 180 volts of video drive is false, misleading and deceptive.

13. "American Parts" Issue on Radio X23

The complaint charges that respondent has falsely represented that:

Its Model X23 [radio] was composed of essential and material parts manufactured in the United States.

Respondent in its pleadings denies that it made the above representation although it now admits by stipulation (Stip. of Facts,

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Par. 79) and also by an amendment to its answer (PAR. SIX E) that "parts essential and material to the operation of Respondent's Model X23 radio set are imported from Japan."

The representation as alleged in the charge shown above is based on an advertisement, contained in specifications distributed by respondent to its distributors and dealers, which reads as follows:

Motorola proudly introduces Model X23 which, to the best of our knowledge, is the smallest 6 transistor American brand radio * * * ever. (Stip. of Facts, Par. 29.)

Based on the above advertisement the examiner finds that respondent did represent, as alleged in the complaint, that its Model X23 radio was composed of essential and material parts manufactured in the United States. *Zenith Radio Corp. v. Federal Trade Commission, supra.*

In view of the fact that it is established by stipulation that parts essential and material to the operation of respondent's Model X23 radio set are imported from Japan, it is found that respondent's representation here under consideration is false.

CONCLUSION

The examiner finds that respondent's representation that its Model X23 radio set was composed of essential and material parts manufactured in the United States is false, misleading and deceptive.

14. "Failure To Disclose Country of Origin" Issue

The issues here under consideration are those arising principally from charges in paragraphs 7, 8, 9 and 11 of the complaint.

Summarized these paragraphs charge that respondent sells certain radio sets containing essential and material parts imported from Japan but fails to clearly and conspicuously disclose this fact to the prejudice of the purchasing public in violation of the provisions of Section 5 of the Federal Trade Commission Act.

Although originally denied, respondent now admits "that before offering certain of its radio sets for sale it does not place markings on the said radio sets and their containers and does not disclose in its instructions and warranties of said sets or elsewhere that parts essential and material to the operation of said radio sets are imported from Japan", as alleged in the complaint. (See respondent's amendment to its answer, par. 7.)

The central issue here is whether the purchasing public has a preference for radios, the essential and material parts of which are of domestic origin. In this connection, the examiner has taken official notice of the following facts:

(1) That, in the absence of an adequate disclosure that essential and material parts of a product, including radio sets, are of foreign origin, the public believes and understands that said essential and material parts are of domestic origin, subject to the right of respondent to present evidence to rebut such fact.

(2) That a substantial portion of the purchasing public has a preference for radios, the essential and material parts of which are of domestic origin, subject to the right of respondent to rebut such fact.

Manco Watch Strap Company, (1962) Docket 7785.

It appears from respondent's proposed findings of fact and reply brief that it interposes the following defenses: (1) that the testimony of its witnesses rebuts the first mentioned official notice and that the further testimony of the same witnesses and certain statistical data rebuts the second mentioned official notice; (2) that respondent's failure to disclose country of origin on foreign components is not deceptive and misleading to the purchasing public because "all of respondent's radios are fully engineered, designed and assembled in this country" (See respondent's proposed findings at p. 94); and (3) that due to "the difficulties and hardships that would arise if respondent's radios are to be marked as to origin of components" there should be no requirement for such markings of country of origin (*idem*, pp. 95-96).

Some background facts will be of assistance on the issues here involved. Respondent is one of the leading and largest producers of radio and television sets in the United States. As shown earlier herein, its sales from all sources in the year 1960 was nearly \$300,000,000. The record shows that respondent does not manufacture the components which go into its radio (and television) sets but functions chiefly as a designer and assembler of such sets which it sells under its nationally known name of "Motorola". It purchases the component parts for its radios from various supplier-manufacturers.

In early 1957, respondent's top management authorized its purchasing department to go "anywhere in the world to buy components" meeting its quality specifications if such components could be purchased abroad at a lesser cost than domestically. Although respondent imports some radio components from other parts of the world, its principal source of imported components is Japan and imports from other countries are nominal. (See Tr. 3057-3059; and RX 40 which shows percentage of total parts imported for use in seven representative Motorola transistor radios. Respondent in its proposed findings at page 94 acknowledges that all foreign com-

ponents in these seven representative models were from Japan.) The dominant factor in respondent's purchase of Japanese radio component parts has been their lower prices. (See testimony of respondent's executive vice president; Tr. 1889, 1892; 3129 et seq; 3352, 3358.) Respondent has had a full time purchasing agent in Japan since about the middle of 1958. (Tr. 1960.) It has been importing Japanese made radio parts longer than any of its principal competitors. (Tr. 1889, 1892, and RX 35 A-C and testimony with reference to said exhibit at Tr. 162-1972.)

The issues here under consideration involve foreign components used in transistor radios as distinguished from tube radios. In 1959, respondent had a line of 11 transistor model radios. (CX 5; Stip. of Facts, Par. 17.) In 1961, it had a line of 9 transistor radios. (CX 62 D; Stip. of Facts, Par. 29.)

One of respondent's 1961 transistor radio models was its Model X23 discussed under the previous issue above and advertised as the "smallest six transistor American brand radio * * * ever", generally known as a miniature transistor radio. (CX 62 D.) 45 percent of the components in the X23 radio are imported from Japan and include among other essential and material parts, such components as transistors, transformers and a speaker. Similarly, the cost of the Japanese components in the X23 constitutes 44 percent of its total cost.

At least six other transistor model radios, not identified as to year of model, have been or are being sold by respondent that contain components imported from Japan. In three of these, from 32 to 38 percent of their parts are imports from Japan. In the remaining three models, from 6 to 7 percent of their parts are imports from Japan, although some of these same models are also made of all domestic parts. (RX 40.)

A number of respondent's principal competitors, whose names like that of respondent are household words, also use Japanese components in the transistor radios they design, assemble, and sell, but as heretofore shown respondent has been importing Japanese made radio parts longer than any of its principal competitors. Like respondent, none of respondent's major competitors disclose to the purchasing public the Japanese origin of essential components in their radios. However, at least one of respondent's principal competitors, Zenith, uses only American-made components in Zenith trade-named radios and uses that fact as an advertising point. One of its advertising slogans is "Made in America by Americans". (Tr. 3115).

The Japanese components used by respondent in its transistor radios are equivalent in quality to those made in the United States.

Repairs or replacements for such foreign parts are as readily available to purchasers of respondent's transistor radios as they are for domestic components.

All of respondent's radios, including those containing Japanese parts, are engineered, designed, and assembled in the United States by personnel in the employment of respondent. The engineering design of a radio bears the same important relationship to the creation of a radio as architecture does to the creation of a building.

The above concludes our summary of background facts.

In rebuttal to the aforementioned official notice taken by the examiner that the purchasing public assumes that radios offered for sale are made up of American-made components unless it is put on notice to the contrary, respondent called five witnesses. None of these were consumer witnesses. All are retail dealers. Three of the five are engaged in the sale of radios, including the respondent's Motorola radios, as part of their furniture, appliance, or jewelry businesses. The remaining two witnesses are engaged in the business of selling and servicing radios and television sets, including Motorola radios.

From their long experience with hundreds of retail customers, these dealers generally testified that the buying public is familiar with and has faith in the nationally advertised names of Motorola, Westinghouse, Zenith, General Electric, and Admiral. From their testimony, it is further established that consumers when buying radios never inquire as to whether the aforementioned American-brand radios contain American or foreign components and never express any statement of belief, one way or another, when shopping for an American-brand radio, relative to country of origin of radio parts in such radios. From this testimony respondent argues in effect that the consumer is indifferent to the country of origin of components that go to make up well-known American-brand radios. (See respondent's reply brief, p. 12 et seq.)

In furtherance of the official notice taken by the examiner and in rebuttal of the testimony given by respondent's aforementioned dealer-witnesses, complaint counsel called two consumer witnesses, one being a schoolteacher and housewife, and the other, a photographer. Each had purchased a Motorola transistor radio within the past two or three years under the impression that all parts therein were American made because they were buying an American brand name radio.

The examiner finds that the testimony of respondent's dealer-witnesses insofar as such testimony purports to show that purchasers do not assume, in the absence of disclosure to the contrary, that the components of radios offered for sale are of domestic origin and

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insofar as such testimony purports to show that purchasers are indifferent to the country of origin of such component parts, is without probative value and not entitled to credence. On the contrary, it is found that the official notice taken by the examiner that the purchasing public assumes, unless disclosure is made to the contrary, that the essential parts of radios offered for sale are of domestic origin, is sustained by the inferences which must be drawn from the testimony of respondent's dealer-witnesses and by the direct testimony of complaint counsel's two consumer witnesses. The official notice here involved, based on the manifold experience of the Commission over many years, cannot be lightly set aside by opinion evidence of dealer-witnesses, as to the unexpressed assumptions of consumers with respect to countries of origin of components in radios ostensibly selling as wholly American-made radios but actually containing foreign components.

The testimony of the same five dealer-witnesses was also elicited and offered in rebuttal to the examiner's official notice of the fact that a substantial portion of the purchasing public prefers to buy radios made of essential components manufactured in the United States. There are common threads running through all or most of such testimony. One of the five dealer-witnesses deals exclusively in nationally advertised American brand name transistor radios. The other four handled both nationally advertised American brand name radios, such as Motorola, G.E., Westinghouse, Zenith, Admiral and Philco, and nondescript Japanese made radios, selling under American names given them by their American importers, such as Ross, Mayfair, Honey Tone, Lloyd's, Viscount and Modern Age. All agree that low price has been the determinative factor in the sale of transistor radios. The sales of those handling both the American brand radios and the Japanese nondescripts have been predominantly of the latter because their prices have been cheaper.

In the experience of at least four of these five dealers, the largest body of purchasers have been teenagers with little money to spend or parents buying inexpensive radios for their children. Since the interest of this group has been primarily in price, these purchasers have readily accepted the Japanese imports because of their lower prices. The record shows, however, that as soon as American-brand radios began, as in recent years, to better compete in price with the Japanese nondescript transistors, a preference asserted itself on the part of many buyers for the well known American-brand radios, whenever they could be bought for about the same price or for only a few dollars more than the Japanese radios.

On the direct question of whether the purchasing public has verbally indicated a preference for radios composed of American-made

parts, one of respondent's dealer-witnesses testified: "That I can't tell, what the public has in its mind. *I am no mind reader on it.*" (Emphasis supplied) (Tr. 3395.) This was basically the response of all of respondent's dealer-witnesses to the same question. (See Tr. 3383.) But all of respondent's witnesses agree that the American public generally has a preference for well-known American brand names, such as Motorola, Zenith, Westinghouse and G.E., to foreign imports.

The testimony of the five dealer-witnesses here under consideration insofar as it purports to show that the purchasing public has no preference for radios, the essential and material parts of which are of domestic origin, is rejected as lacking probative value.

The testimony of complaint counsel's two consumer witnesses established independently and also gave corroboration to the official notice taken by the examiner that a substantial portion of the purchasing public prefers radios, containing domestically made component parts.

Although respondent relies principally on the testimony of its dealer-witnesses to rebut the official notice here under consideration, it also presented as "additional evidence" certain statistical data published by the Bureau of Census and other non-governmental sources for the purpose of showing "that the public has no preference for radios made only of domestic components." (See respondent's proposed findings, pp. 101-102.) This data is contained in Respondent's Exhibits Numbers 65, and 67.

RX 65 shows imports into the United States of radio receivers (except radio-phonograph combinations) and of receiving tubes and components such as resistors, capacitors and inductors, from all countries for the years 1952 through 1961. The exhibits show that the percentage of imports from Japan out of the total from all countries increased from a little less than one percent in 1952 to 76.5 percent in 1961. In 1960 and 1961, about 75 percent of the dollar imports from Japan was in the form of transistor radios. The described imports from Japan in 1961 declined one-half of one percent from that in 1960.

RX 67 deals with a comparison of the total United States production of portable radios, both of the transistor and vacuum tube types, with total imports of the same commodities from Japan in the years 1959, 1960, and 1961, but with incomplete figures for 1959. The total domestic production of such radio sets in this country increased from 4,534,616 in 1960 to 5,747,140 in 1961. Imports of radio sets from Japan in the same years increased from 6,395,815 in 1960 to 10,056,741 in 1961.

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On the basis of this reported data, respondent contends: "Certainly these figures belie the existence of any widely held prejudice against the Japanese product."

This contention is rejected because the evidence shows (1) that low prices have been the dominant factor in the growth of radio set imports from Japan and (2) that where the price differential between Japanese and American brand radios is narrowed, a preference for the American brand radio reasserts itself. In this connection the testimony of the largest of respondent's dealer-witnesses in point of transistor radio sales, is pertinent:

HEARING EXAMINER BUSH: You referred to radios which you call "nondescript Japanese radios." Do all of these radios fall in that category?
THE WITNESS: I would say they fall in that category.

* * * * *

HEARING EXAMINER BUSH: * * *

Do those radios then sell substantially less than comparable models manufactured by well-known American companies?

THE WITNESS: At one time they did, but in the last year or so, American radios have come out where they are competing with these nondescript Japanese radios, and a bigger portion of our business now is we are selling American brands in competition with the Japanese, whereas at one time, these Japanese radios had an absolute heyday. Now they don't have that anymore because for a few dollars more, the customer will now buy a Motorola or a General Electric or a Westinghouse, because we are only talking about a few dollars, not where formerly it was ten, fifteen dollars' difference in price. (Tr 3129-3130)

Since the evidence shows that the purchasing public prefers American-brand radios to Japanese imports when the former can be purchased at the same price or even for a few dollars more than the Japanese product, the statistical data in RX 65 and 67 cannot be interpreted or given any weight as showing an American preference for Japanese radios as against American-brand radios. But there are additional reasons why such statistical data is not entitled to any weight on the issue of preference. These have been succinctly stated by complaint counsel in their proposed findings of fact at page 135 as follows:

* * * The exhibits, taken together, cannot be understood to show that the public has a preference for Japanese radios and radio parts or does not have a very strong preference for American radios and radio parts, because there is absolutely no way of telling whether the imported components ended up in consumer products; or in what density; or whether the completed radios, if sold to the public, were clearly marked as to country of origin; or whether such complete radios were competitive with American brand radios or were one or two transistor, three or four dollar radios.* * *

The examiner finds that the statistical data here under consideration fails to rebut the official notice taken of the fact that a sub-

stantial portion of the purchasing public has a preference for radios, the essential and material parts of which are of domestic origin.

Respondent's second defense is that its failure to disclose the foreign origin of the essential and material components of its American trade-named Motorola transistor radios is not deceptive because "the part most important to the radio's performance, its design and engineering, is wholly American; and the craftsmanship involved in the process of assembling the components into the end product is also wholly American." (Respondent's proposed findings of fact, p. 98.)

The examiner agrees that the design, engineering and assembling of the involved radios are wholly American but disagrees that these aspects of putting a radio set together are more important than the essential and material components that go to make up a radio, as implied by respondent. Although we are not here concerned with the quality of the Japanese components used by respondent in its radio sets which we have found to be equal to that of their American counterparts, we are concerned with the preference by the American public for radios manufactured out of American-made components, as established by our official notice and by the only direct consumer evidence in the case. As the Commission has stated in the *Manco* case, *supra*, we note here that "* * * we neither approve nor disapprove the state of mind reflected by the consumer preference for American goods; we merely recognize that it exists."

The fact that respondent and its many competitors, both large and small, use Japanese components in their transistor radios but fail to disclose this fact to the consuming public, although the legal requirement for such disclosure has long been established, is indirect but additional evidence that those in the industry recognize the preference for American-made goods and remain silent about the foreign components in their radios out of apprehension that disclosure might adversely affect sales. The fact that at least one of respondent's principal competitors, Zenith, advertises its products as being wholly American-made under the apparent belief that this is a selling point is yet another indication of the soundness of the official notice taken herein that the American purchasing public prefers radios composed of parts manufactured in the United States.

Another facet of respondent's second defense is the contention that the disclosure of the Japanese origin of the components of its radios would be "more deceptive and misleading to the public than a failure to disclose" in that, as argued by respondent, the "word 'Japan' on respondent's radios may mislead some consumers into rejecting them because of doubt as to quality or convenience of repair and neither

would be warranted." (Respondent's proposed findings of fact, p. 97.)

The examiner is of the opinion that this contention is without merit. The evidence shows that the consuming public has great confidence in nationally advertised American-brand names and in the companies which put out such brand-name merchandise. There can be little doubt that if respondent put its prospective customers on notice concerning the foreign origin of some of its component radio parts the customers would be fully satisfied that respondents stood in back of such components as much as it did behind its domestic components. Similarly, the public would realize that respondent's nationwide service facilities would be available for the service of any parts of its products, whether they be of foreign or domestic origin. But in any event, in view of the public's preference for radios whose essential component parts are made in the United States, the consumer should not be deceived by the silence of a manufacturer into believing that a nationally advertised American brand product is made of parts manufactured in this country when in fact the components are of foreign origin.

Respondent's final argument is that "practical" difficulties in marking radio sets with the names of countries of origin of its foreign components would compel it "to abandon its imported components". The examiner is not impressed with the "difficulties and hardships" respondent claims "would arise if respondent's radios are to be marked as to origin of components." (Respondent's proposed findings of fact, pp. 95-96.) Since it appears that all foreign components in respondent's line of transistor radios are imported from Japan,²⁵ it is difficult to see why there should be any special or unusual difficulties in marking radios with only one country of foreign origin. Respondent's executive vice president testified that such markings would be only "somewhat impractical". (Tr. 1918.)

It is found that respondent would have no special or unusual difficulties in its manufacturing processes in segregating its foreign components, even if received from many foreign countries, in the manner required to assure easy identification for appropriate markings of foreign origin of component radio parts on completed radio sets or their containers. The right of the public to disclosure of foreign origins is paramount to such inconvenience and extra expense as respondent may have in the markings of foreign origins. The Com-

²⁵ Respondent's representative transistor radios which employ foreign components are shown in RX 40 and 64. All such components are imported from Japan as may be seen from the following statement made by respondent in its proposed findings of fact at page 94: "Respondent's exhibits 40 and 64 list representative models of respondent's radios and the extent to which each is comprised of Japanese-made parts."

mission in *Olson Radio Corporation*, Docket 7702 (May 9 and June 26, 1962) adopted the findings of fact in the Initial Decision therein which contains the following statement:

* * * If the corporate respondent sells in interstate commerce imported merchandise which presents insurmountable difficulties in complying with the foreign labeling laws, its responsible officials must choose between complying with the law or dropping such merchandise from their product line. The injury to the public is just as real whether failure to disclose the foreign origin of a product results from intentional fault, inadvertence, or difficulty of compliance.* * *

It is found that none of the evidence presented by respondent rebuts the evidence adduced by complaint counsel that a substantial portion of the purchasing public has a preference for radios assembled from essential and material component parts of domestic origin.

The evidence shows that respondent has furnished brochures, leaflets, radios, radio containers, warranties and operator's instructions to retailers to others which fail to disclose the foreign origin of components of certain of its radios. Accordingly, it is found that respondent furnished or otherwise placed in the hands of retailers and others the means and instrumentalities by and through which they may mislead the public as to the country of origin of essential and material parts of certain of their radio sets.

CONCLUSIONS

The examiner finds that the failure by respondent to disclose the foreign origin of material and essential parts of its radio sets have had, and now have, the capacity and tendency to mislead members of the purchasing public into the purchase of substantial quantities of respondent's products by reason of said erroneous and mistaken belief.

15. "Abandonment" Issue

Respondent seeks a dismissal of all but one of the seventeen charges of false and misleading advertisements of representations contained in paragraph 5 of the complaint on the ground that the advertisement claims which lead to such charges were abandoned prior to the issuance of the complaint herein. A motion to the same effect made at the prehearing conference herein was denied. The present request will be considered as a renewal of the earlier motion.

Preceding sections of this Initial Decision show that all but two of the seventeen charges set forth in paragraph 5 of the complaint

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have been fully sustained by the evidence of record herein after full hearing.

The facts of record show that respondent discontinued the involved advertising claims prior to the filing of the complaint in this cause. Respondent contends (1) that this discontinuance of the challenged advertisements constitutes "abandonment" of the use of such advertising claims and (2) that with respect to each of the "abandoned claims there are circumstances which exist which preclude the necessity of entering a cease and desist order to bar such claims". (Respondent's proposed findings of fact, p. 88.)

Summarized, the "circumstances" pleaded by respondent as justifications for the nonentry of a cease and desist order herein on the involved representations are: (1) that it has stopped manufacturing the radio and television receiving sets with respect to which it has made the challenged advertisement claims, (2) that it no longer makes the advertisement claim that its intrusion gun type picture tube will last 10 times longer than the conventional gun picture tube because the intrusion tube "has now become the most popular gun used and respondent admits that its claim of greater reliability, though validly made at the time, would not be valid today", (3) that it no longer advertises its Custom-Matic Tuner as being the first tuner specifically designed for remote control and never requires fine tuning because there are "now competitive tuners which perform all of the functions of respondent's Custom-Matic Tuner", and (4) that it has not for more than two years made its former advertised claim that its 4-Wafer Cascade Tuner was the only tuner which turned out a stronger signal than it picked up.

The term "abandonment" necessarily bears a connotation of an acknowledgment by a respondent of a wrongful practice and a bona fide showing of intent not to engage in the proscribed conduct in the future.

In the instant matter, the "abandonment", or more properly speaking, the discontinuance of the challenged advertisements was not due to any recognition of the wrongfulness of the involved practices and a desire to disengage from unlawful acts but was due entirely to the operation of normal business factors, as shown below.

Dealing first with respondent's contention that it is entitled to a dismissal due to the "circumstance" that it had stopped manufacturing the radio and television receiving sets with respect to which it has made many of the challenged advertised claims, the record shows that respondent, like other members of its industry, puts out a new line of radio and television receiving set models every year which it advertises as the following year's models. The seventeen charges above referred to relate principally to the advertised claims

made in 1959 with reference to respondent's 1960 line of radio and television sets. (Stip. pars. 6, 11, 17, 23 and 24.) Pursuant to respondent's policy of introducing a new line of radio and television receiving set models every year, the advertisements of respondent's 1960 models were necessarily terminated within a year of their commencement or for the most part in the latter part of 1959. It is hardly necessary to state that such a discontinuance of the challenged advertisements is entirely devoid of any elements of recognition of wrongful practices and could not in any sense constitute an "abandonment" of a character entitled to consideration as a basis for a dismissal of charges of false and misleading advertisements.

Similarly, the three other "circumstances" which respondent asserts as showing abandonment of the remaining challenged advertisement claims are also devoid of any recognition of deceitful practices. With respect to the "circumstance" relating to the "abandonment" of its representation that its 4-Wafer Cascade Tuner was the only tuner that turned out a stronger signal than it picked up, respondent asserts that there was only one advertisement on this character, that the advertisement took place about two and a half years prior to the issuance of the complaint, and that "it cannot reasonably be presumed that respondent's abandonment of the claim is less than permanent." Contrary to the respondent's contention that the advertisement was published only once, the record shows that advertisement was published at least three times. (CX 46, 47 and 58.) No explanation is given by respondent as to why it has discontinued the advertisement here under discussion and there is no acknowledgment that the discontinuance was due to the fact that the representation was false.

The "circumstances" asserted by respondent for the "abandonment" of its claim that its intrusion type picture tube would outlast 10 times the conventional picture tube and of its claim that its Custom-Matic Tuner was the first tuner specifically designed for remote control and never required fine tuning, constitute no more than admissions that it discontinued such advertisement claims because competitors now had the same features in their television receiving sets and not because as found *infra* that the original claims were false and misleading.

As seen, 15 of the 17 false and misleading advertising charges here under consideration have been found fully sustained after full hearing. Respondent has not only failed to acknowledge any wrong doing in making the advertising claims which lead to the said 15 charges but has also chosen to contest each of the charges and to insist that the advertising practices in question had been legal. On many of these charges, the defenses presented have been most

Conclusion

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tenuous. In the circumstances of this case, the fact that respondent discontinued the false and misleading advertisements prior to the issuance of the complaint is immaterial. *Ward Baking Company*, 54 F.T.C. 1919. In a case which closely parallels the instant proceeding on the issue of abandonment, the Court of Appeals in a *Per Curiam* opinion in *Spencer Gifts, Inc. v. Federal Trade Commission*, 302 F. 2d 267 (3rd Cir. 1962) held:

In this case the Federal Trade Commission has issued a cease and desist order with reference to certain deceptive advertising of the petitioner, despite the fact that the petitioner had discontinued the conduct in question several months before the Commission's inquiry began. The sole question now is whether the Commission was arbitrary in concluding that, the timing and circumstances of the abandonment of the illegal practice considered, there remained sufficient risk of its resumption to justify interdiction. We are satisfied that the Commission did not abuse its discretion, particularly since the petitioner insisted before the Commission that the practice in question had been legal.

In the present case there is not only an insistence, as in the *Spencer* case, that the challenged advertisements were legal but also no indication anywhere in the record or on brief that respondent intends to refrain from making similar false and misleading advertisements in the future. The evidence shows that the technical representations involved in the advertisements were generally made without advance clearance or approval from respondent's engineering staff. From the examiner's observation of respondent's fine electrical engineers, he is convinced that they would not have given advance approval or assumed professional responsibility for the representations made in the advertisements, if they had been called upon to render independent judgment on the proposed representations. Respondent is in need of a new advertising policy which would require independent clearance from its engineering staff on all technical representations proposed to be made in advertisements to the end that only true and accurate technical representations be made about its products which generally have high quality.

CONCLUSION

The examiner finds that the public interest requires denial of respondent's motion for a dismissal of 16 of the 17 charges of unlawful practices contained in paragraph 5 of the complaint, notwithstanding respondent's discontinuance of said unlawful practices prior to the issuance of the complaint herein. (It should be noted, however, that there will be a dismissal of 2 of said 16 charges on the merits of respondent's defenses thereto, rather than on the ground of abandonment.)

Order

ORDER

It is ordered, That respondent, Motorola, Inc., a corporation, and its officers, agents, representatives and employees directly or through any corporate or other device in connection with the offering for sale, sale or distribution of radio sets, television sets and replacement parts therefor in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

1. Representing directly or by implication:

(a) That its Model 8x26 radio set or any substantially similar receiver has 9 times more capability than other receivers to select a desired radio station or that any of its receivers have selectivity in excess of the true facts.

(b) That its Model 8x26 radio set or any substantially similar receiver has the power output of a 10-tube radio or that any of its receivers has a power output in excess of the true facts.

(c) That its Models 8x26, L12 and L14 radio sets or any substantially similar receivers play for hundreds of hours on low priced batteries or that any of its receivers play on batteries for any number of hours in excess of the true facts.

(d) That the chassis or audio system contained in its Model L14 radio set or that any substantially similar chassis or audio system contained in any of its receivers is revolutionary or new or that any of its chassis or audio systems that are in general use in the radio industry are revolutionary or new.

(e) That its sentry system eliminates 3 out of 4 service calls or that any of its protective devices will reduce the necessity for repairs of receivers in excess of the true facts.

(f) That its sentry system triples TV life expectancy or that any of its protective devices prevent receiver failures for periods in excess of the true facts.

(g) That its picture tubes last 10 times longer than comparable picture tubes or that any of its picture tubes are constructed to last for periods in excess of the true facts.

(h) That its Custom-Matic Tuner or any substantially similar mechanism will not require fine tuning or that any of its tuners is the first tuner specifically designed for remote control.

(i) That any of its tuners is the only tuner to turn out a stronger signal than the one it picks up.

(j) That all or any of its receivers have picture power or video drive in excess of the true facts.

(k) That its receivers are manufactured in the United States when material and essential parts of said receivers are produced in a foreign country or foreign countries.

2. Misrepresenting in any manner the origin, power, economy of operation or performance of its receivers or component parts.

3. Offering for sale, selling or distributing products which are, in whole or in substantial part, of foreign origin, without clearly and conspicuously disclosing on such products, and if the products are enclosed in a package or carton, on the front of said package or carton, in such a manner that it will not be hidden, obliterated or easily removed, the country of origin thereof.

4. Furnishing or otherwise placing in the hands of retailers or dealers in said products the means and instrumentalities by and through which they may mislead or deceive the public in the manner or as to the things hereinabove prohibited.

It is further ordered, That the charge of the complaint relating to respondent's representation that its Model L14 radio "was the most powerful long-distance all-transistor portable available", as contained in PARAGRAPH FIVE C. and PARAGRAPH SIX C. of the complaint, be, and the same hereby is, dismissed.

It is further ordered, That the charge of the complaint relating to respondent's representation that "its 1960 television receivers represented the only television line with completely hand-wired chassis", as contained in PARAGRAPH FIVE D. and PARAGRAPH SIX D. of the complaint, be, and the same hereby is, dismissed.

It is further ordered, That respondent's motion for dismissal of all charges contained in PARAGRAPHS FIVE AND SIX of the complaint, except one, on the ground of abandonment of the unlawful practices therein alleged, be, and the same hereby is, denied.

OPINION OF THE COMMISSION

JANUARY 14, 1964

By Dixon, *Commissioner*:

I

This matter is before the Commission for consideration of exceptions by both parties to the hearing examiner's initial decision and

order dismissing two charges of the complaint and holding that respondent had violated Section 5(a)(1) of the Federal Trade Commission Act¹ on various other counts. In substance the complaint charges respondent with falsely advertising the capabilities and characteristics of its radio and TV sets and with failure to disclose the foreign origin of component parts of its radio sets. Although the facts were largely stipulated, their interpretation is sharply disputed.

II

Counsel in support of the complaint except only to the hearing examiner's dismissal of the charges of the complaint relating to respondent's allegedly false representations that: (1) its Model L14 radio was the most powerful long-distance all-transistor portable available (initial decision, pp. 101-102, 106, 162); and (2) its 1960 television receivers constituted the only television line with completely hand-wired chassis (initial decision, pp. 140-145, 162).

Both parties are agreed that a radio's "sensitivity," which is defined by stipulation as "The characteristic of a radio that determines the extent to which a radio is capable of receiving weak or distant signals," is the primary criterion of power in "the most powerful long distance" issue, and both introduced sensitivity measurements as proof. The hearing examiner dismissed the results of respondent's sensitivity tests on the ground that they were made just prior to the hearing and were likely biased in respondent's favor. He relied instead upon tests conducted by respondent's competitors, *viz*, tests by Zenith Radio Corporation in 1957, 1959 and 1962, and by Radio Corporation of America in 1958, showing that the Motorola Model L14 radio was less sensitive than the Zenith Model Royal 1000 and the RCA Model MBT-6. However, the hearing examiner found, and we concur, that the latter two models are not fully comparable to Motorola Model L14 because they are short wave radios containing many bands other than the standard band and are much heavier and more expensive radios. Since buyers of standard band radios do not expect to receive short wave reception, we find no likelihood of the consuming public being deceived by respondent's "most powerful long-distance all-transistor portable" allegation. Complaint counsel's exception to dismissal of the portion of the complaint relating to this issue is thus denied.

The exception by counsel in support of the complaint to dismissal of the completely hand-wired chassis charge is also disallowed. Respondent's advertisement in the October 15, 1959, supplement to

¹ 38 Stat. 719 (1914); 52 Stat. 111 (1938); 15 U.S.C.A. 45(a)(1).

Home Furnishings Daily,² to the effect that its 1960 TV line was the only TV line with a completely hand-wired chassis and tuner, was, at worst, ambiguous rather than untrue or false. While such representations may be enjoined,³ the circumstances here present, including the facts that (1) only a single advertisement was involved, (2) the advertisement was published in a trade magazine not usually distributed to consumers, and (3) the single plated circuit model included in respondent's 1960 line was discontinued and all of its 1961, 1962 and 1963 models were completely hand wired, dictate dismissal.

III

Respondent's exceptions deal principally with the matter of foreign origin of component parts. In particular, respondent excepts to: (1) official notice by the hearing examiner (initial decision, pp. 148, 149) that a substantial portion of the purchasing public prefers radios, the essential and material parts of which are of domestic origin and, in the absence of disclosure to the contrary, the public believes and understands that such parts are of domestic origin; (2) the finding (initial decision, p. 157) that respondent's failure to disclose the foreign origin of material and essential parts of its radio sets has the capacity and tendency to mislead members of the purchasing public to purchase substantial quantities of respondent's products; (3) the finding (initial decision, p. 148) that respondent misrepresented that its Model X23 radio was composed of essential and material parts manufactured in the United States; and (4) the portions of the hearing examiner's order requiring disclosure of foreign origin (initial decision, p. 162).

Respondent does not manufacture all of the component parts of its radios, but, rather, purchases some parts from domestic and foreign manufacturers. Foreign parts, which are imported chiefly from Japan and to a lesser extent from Germany, Holland and England, include such elements as speakers, transformers, transistors, ceramic capacitors, coils, tuners, and tuning condensers. Respondent's 1961 line included nine transistor radio models, including the X23, which respondent advertised as "* * * the smallest six transistor American brand radio * * * ever!" Forty-five percent of the component parts, representing forty-four percent of the total cost of

² The hearing examiner erroneously found that this advertisement was also published in *Life* magazine.

³ "It is not difficult to choose statements, designs and devices which will not deceive. Those which are ambiguous and liable to mislead should be read favorably to the accomplishment of the purpose of the act." *United States v. 95 Barrels of Vinegar*, 265 U.S. 438 (1924).

Model X23, were of Japanese origin. Respondent's other 1961 transistor radios contained from seven to thirty-eight percent foreign-made parts. A purchaser cannot tell from looking at the exterior of such models that they contain foreign-made parts and rarely, if ever, do prospective purchasers examine the interior of radios. Inspection of the interior of Model X23 discloses that while the tuning condenser bears the name Mitsumi Electric Company, Ltd., the word "Japan" stamped on the speaker is completely concealed by a sticker. Most of the other foreign-made components are not marked to show origin and are indistinguishable in appearance from domestic parts, so that even an astute purchaser inspecting such parts would not be apprised of their origin.

Respondent introduced testimony of its senior project engineer and of its Japanese purchasing agent to the effect that many of its competitors, including the largest and best known radio manufacturers in the United States, also use foreign parts in their radios. It appears from the testimony that the practices of representing radio and television sets as American-made, even though such sets contain foreign-made components, and of failing to disclose the origin of such components are widespread in the radio and television industry.

In the light of the apparent industry-wide incidence of the aforementioned practices, the Commission, on September 3, 1963, directed that its Bureau of Industry Guidance, in consultation with the Bureau of Deceptive Practices, initiate proceedings looking to the promulgation of a trade regulation rule dealing with foreign-made component parts in the radio and TV industry, as provided for in § 1.63 of the Commission's Procedures and Rules of Practice (August 1, 1963), 28 Fed. Reg. 7080, 7083 (July 11, 1963).

In the exercise of its discretion, the Commission has decided to suspend consideration of the foreign-origin issues pending completion of the trade regulation rule proceeding, at which time we will take such action as we then deem to be appropriate.

Accordingly, in respect to the foreign-origin issues, we will not at this time adopt the hearing examiner's findings and conclusions numbered 13 and 14 at pages 147 through 157 of the initial decision nor paragraphs 1(k), 3 and 4 of the hearing examiner's order at page 162 of the initial decision. This action is not to be considered as a decision upon the merits of these issues.

IV

Respondent has also taken exception to paragraphs 1 and 2 of the examiner's order, contending that they are not reasonably related

to the practices disclosed on the record, are not sufficiently clear and precise in their terms, and are unnecessary to prevent continuance or repetition of the practices found. We find no substance to respondent's contention with respect to paragraph 1. In fact, respondent concedes that its objections to that paragraph are minor and we find that they are set forth principally in the form of a proposed order appended to its appeal brief. A review thereof discloses that respondent would limit the prohibitions in the subparagraphs of paragraph 1 to a specific model or type of radio, audio system or tuner or a "substantially similar" device. Such a restriction would make paragraph 1 of the order practically worthless in view of respondent's own statement that its products "are under continuous improvement and change with new models introduced each year." Respondent's appeal as to this paragraph is denied.

Paragraph 2 of the order would prohibit respondent from misrepresenting in any manner the origin, power, economy of operation or performance of its receivers or component parts. We agree with respondent that such a broad prohibition is not justified in this case. In our view, the subparagraphs of paragraph 1 of the examiner's order, which we are adopting, are sufficiently broad to bar future use of those deceptive representations shown in this record. Accordingly, the order in the initial decision will be modified by striking therefrom paragraph 2.

V

We have reviewed the entire record and are of the opinion that, aside from the portions of the record involved in the appealed issues, those portions of the initial decision dealing with the charges that respondent falsely represented that its tube sentry system eliminated three out of four service calls require revision. Specifically, we do not find, as did the hearing examiner at page 108 of the initial decision, that the consuming public would interpret respondent's advertisements of having eliminated three out of four service calls to refer only to service calls relating to tube failures. In the face of such unqualified claim, we cannot expect the purchasing public, unversed in TV electronics, to make such a restrictive interpretation. The fourth full paragraph of page 108 of the initial decision will accordingly be revised.

VI

The reference on page 66 of the hearing examiner's initial decision to "Federal Trade Practices Act" is obviously in error and will be changed to read "Federal Trade Commission Act."

VII

The hearing examiner's initial decision, modified and supplemented as indicated in this opinion, will be adopted as the decision of the Commission. An appropriate order will be issued.

FINAL ORDER AS TO ALL ISSUES EXCEPT THOSE PRESENTED UNDER
PARAGRAPHS SEVEN, EIGHT, AND NINE OF THE COMPLAINT*

This matter having been heard by the Commission upon exceptions to the initial decision by both parties, and upon briefs and oral argument in support thereof; and

The Commission, for reasons stated in the accompanying opinion, having determined that the exceptions of counsel supporting the complaint should be denied and that respondent's exceptions should be granted in part and denied in part; and

The Commission having further determined, for reasons stated in the accompanying opinion, that the initial decision should be modified, and, as so modified, adopted as the decision of the Commission:

It is ordered, That the beginning of the first sentence of the initial decision be, and it hereby is, amended to read:

"The general issue in this matter is whether the respondent, a distributor of radio and television receivers, is in violation of the Federal Trade Commission Act * * *."

It is further ordered, That the fourth full paragraph on page 108 of the initial decision be, and it hereby is, deleted in its entirety, and the following substituted therefor:

"In addition, counsel in support of the complaint adduced evidence to show that more than half of all service calls are unrelated to tube failures, evidencing that the alleged elimination of 3 out of 4 service calls through the use of the tube sentry system is false *ipso facto*."

It is further ordered, That the three paragraphs beginning on page 140 with the words "The basis for the charge" and ending on page 141 with the words "*Home Furnishings Daily*" of the initial decision be, and they hereby are, deleted in their entirety and the following substituted therefor:

"The basis for the charge here under consideration is an elaborate eight-page advertisement published as a Supplement to the October 15, 1959, issue of *Home Furnishings Daily*, a daily trade newspaper. A copy of the advertisement is in the record as CX 54 A-H.

* Final order of March 28, 1968, further modified hearing examiner's initial decision, and dismissed for failure of proof the charges relating to foreign origin of component parts.

“Although the advertisement is prominently captioned ‘ADVERTISED IN LIFE’, respondent admits that the advertisement was never published in *Life* magazine.”

It is further ordered, That decision as to the correctness and propriety of the hearing examiner’s findings, conclusions (numbered 13 and 14 appearing at pages 147 to 157 of the initial decision) and order to cease and desist (paragraphs 1(k), 3 and 4 appearing at page 162 of the initial decision) dealing with the question of foreign origin of component parts be reserved and withheld pending completion of the trade regulation rule proceeding described in the accompanying opinion.

It is further ordered, That the initial decision be modified by striking therefrom paragraph 2 of the order to cease and desist on page 162 thereof.

It is further ordered, That the initial decision as modified herein, and excepting those parts described in the above paragraph as to which decision is withheld, be, and it hereby is, adopted as the decision of the Commission.

It is further ordered, That respondent shall, within sixty (60) days after service upon it of this order, file with the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with the order to cease and desist as modified herein.