

IN THE MATTER OF
FIGGIE INTERNATIONAL, INC.

FINAL ORDER IN REGARD TO ALLEGED VIOLATION OF SEC. 5 OF THE
FEDERAL TRADE COMMISSION ACT

Docket 9166. Complaint, May 17, 1983—Final Order, April, 11, 1986

This final order requires, among other things, a Richmond, Va. manufacturer and seller of home heat detectors to provide notification that smoke detectors give earlier warning than heat detectors in nearly all residential fires to past purchasers of its heat detectors. Respondent must also disclose that fact in any future promotional materials that make claims about the residential fire protection provided by heat detectors. Additionally, respondent is prohibited from misrepresenting: (1) the performance characteristics of any heat or smoke detector, or any system containing both; or (2) any standard or recommendation established by the National Fire Protection Association or any other group concerning fire warning systems.

Appearances

For the Commission: *Christopher Schwartz and David M. Malone.*

For the respondent: *Edwin S. Rockefeller and Leslie Donovan, Schiff, Hardin & Waite, Washington, D.C.*

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 Figgie International, Inc., a corporation ("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, Figgie International, Inc., is an Ohio corporation with its principal place of business at 1000 Virginia Center Parkway, Richmond, Virginia.

PAR. 2. Respondent maintains a substantial course of business, including the acts and practices set forth hereinafter, in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act.

PAR. 3. Respondent manufactures, advertises, offers for sale, sells and distributes residential fire alarm products including heat detectors and smoke detectors. Respondent's fire alarm products are some-

times identified by the trade name "Vanguard" and are sold to the public by respondent's distributors through in-home sales presentations. Respondent offers these products as fit for the purpose of affording fire warning protection to residential occupants.

PAR. 4. In order to sell its fire alarm products respondent has made numerous representations in various promotional and training materials it prepared and disseminated. Illustrative of respondent's representations are the following:

- (1) Heat detectors "will give immediate early warning."
- (2) Heat detectors provide "fast response to hot fires." [2]
- (3) Smoke detectors provide only "partial protection."
- (4) "Mechanical heat detectors are essential to provide the reliability that smoke detectors lack and to guard against the many types of fires where smoke detectors may be ineffective."
- (5) "The 'VANGUARD' Thermosonic 50-Ft. Heat Detector and the 'VANGUARD' Smokesonic Smoke Detector will provide the combination needed to give a greater measure of life safety."

PAR. 5. Through the use of these representations, and others of similar meaning, and by offering its fire alarm products as fit for the purpose of affording fire warning protection to residential occupants, respondent represents, directly or by implication, that:

- (1) In the event of fire, respondent's heat detectors provide sufficient warning to occupants to allow them to escape safely.
- (2) Respondent's fire alarm systems combining heat detectors and smoke detectors provide significantly greater fire warning protection for occupants than smoke detectors alone.

PAR. 6. In truth and in fact:

- (1) In nearly all residential fires, life endangering conditions will occur prior to the activation of respondent's heat detectors. Such heat detectors, therefore, do not provide sufficient warning to occupants in the event of fire.
- (2) Respondent's fire alarm systems combining heat detectors and smoke detectors do not provide significantly greater fire warning protection for occupants than smoke detectors alone.

Therefore, the statements and representations set forth in Paragraphs Four and Five were and are deceptive and unfair.

PAR. 7. Respondent's use of the aforesaid deceptive and unfair statements and representations has had and now has the capacity and tendency to deceive consumers and to induce purchases of substantial quantities of respondent's products. [3]

PAR. 8. The acts and practices of respondent, as herein alleged, were and are all to the prejudice and injury of the public and constituted,

and now constitute, unfair and deceptive acts or practices in or affecting commerce in violation of Section 5 of the Federal Trade Commission Act.

INITIAL DECISION BY

MONTGOMERY K. HYUN, ADMINISTRATIVE LAW JUDGE

OCTOBER 23, 1984

PRELIMINARY STATEMENT

On May 17, 1983, the Federal Trade Commission ("Commission") issued an administrative complaint charging Figgie International, Inc. ("Figgie") with a violation of Section 5 of the Federal Trade Commission Act, as amended (15 U.S.C. 45), in connection with certain product claims allegedly made by Figgie in the distribution and sale of heat detectors. On July 1, 1983, Figgie filed an answer denying that it violated the Federal Trade Commission Act as charged. On November 8, 1983, Paragraphs 5 and 6 of the complaint were amended so as to change several words. The amended complaint alleged generally that promotional materials supplied to and used by Figgie distributors during in-home sales presentations contain express and implied effectiveness claims for Vanguard heat detectors which are deceptive and unfair. More specifically, the amended complaint challenges the lawfulness of alleged product claims (1) that in the event of most fires Vanguard heat detectors provide the necessary warning to allow a safe escape in residential fires and (2) that Vanguard fire alarm system combining heat detectors and [2] smoke detectors provide significantly greater fire warning protection than smoke detectors alone.

Evidentiary hearings for the presentation of complaint counsel's case-in-chief began on April 30, 1984 and ended on May 9, 1984. Defense hearings began on June 13, 1984 and ended on June 20, 1984. Sixteen witnesses gave testimony. The transcript of hearings, including prehearing conferences, consists of some 1,700 pages and about 86 exhibits, including a number of slides and tapes, were received in evidence. The evidentiary record was closed on July 6, 1984.¹

The proposed findings and conclusions submitted by the parties and their arguments in support thereof have been given careful consideration by me and to the extent not adopted by this Initial Decision, in the form proposed or in substance, are rejected as not supported by

¹ By order of September 18, 1984, the Commission extended the due date of this initial decision to October 23, 1984.

the evidence or as immaterial. Any motion appearing on the record not heretofore or hereby specifically ruled upon either directly or by the necessary effect of the conclusions in this Initial Decision are hereby denied.

Upon consideration of the entire record in this proceeding and having considered the demeanor of the witnesses, I make the following findings of fact and conclusions of law and order based on the record considered as a whole:² [3]

FINDINGS OF FACT

I. JURISDICTION

1. Respondent Figgie International, Inc. ("Figgie") is a corporation organized and doing business under the laws of Ohio, located at 1000 Virginia Center Parkway, Richmond, Virginia (Ans. of Figgie, ¶ 1).

2. Figgie is now and has been engaged in the distribution, promotion, offering for sale and sale of heat and smoke detectors under the trade name "Vanguard" (CX 135, Respondent's Response to Complaint Counsel's Request for Admission No. 2).

3. Figgie, through its Interstate Engineering Division (hereinafter sometimes referred to as "Figgie-Interstate"), ships goods, including but not limited to Vanguard heat detectors and smoke detector, through interstate commerce (CX 135, Admission No. 6).

4. The Interstate Engineering Division of Figgie had total sales of about \$29,939,000 for the period January 1, 1981 through May 31, 1983 (CX 135, Admission No. 5).

5. Figgie-Interstate had total sales of about \$23,212,000 for the period January 1, 1979 through December 31, 1980 (CX 125).

6. In the course and conduct of its business, Figgie-Interstate has produced and disseminated promotional material through the United States mails pertaining to Vanguard smoke and heat detectors for the purpose of promoting the sale of Vanguard fire alarms (CX 135, Admission No. 8).

7. In the course and conduct of its business, and at all times relevant to the Complaint, Figgie-Interstate has maintained a substantial

² For the purposes of this initial decision, the following abbreviations were used:

- F. - Finding of Fact in this decision
- CPF - Complaint Counsel's Proposed Findings
- RPF - Respondent's Proposed Findings
- CR - Complaint Counsel's Reply
- RR - Respondent's Reply
- Tr. - Transcript of hearings, sometimes preceded by the name of the witness
- CX - Complaint Counsel's exhibit
- RX - Respondent's exhibit
- Comp. - Complaint
- Ans. - Answer

course of trade in these products, in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act (CX 135, Admission No. 10).

II. BUSINESS OF RESPONDENT

A. *Company History*

8. Figgie was known as A-T-O, Inc., until the name was changed in 1981 (Schoettler 1259). The name change did not signify any change in Figgie-Interstate's method of doing business (Schoettler 1259; McGee 602; Sterner 1575). [4]

9. Figgie is a diversified international operating company with 30 major divisions marketing industrial, consumer and technical products. Some of Figgie's better known products include American La-France fire apparatus and Rawlings sports equipment (CX 62B). Figgie claims to be the "World's Largest Integrated Manufacturer of Fire Protection and Security Equipment." Annual sales are in excess of \$700 million (CX 62B).

10. Interstate Engineering was at one time an independent corporation headquartered in California. In 1959, Interstate introduced the first Vanguard heat detector. In November 1967, Interstate merged into A-T-O and it is now an operating division of Figgie (CX 64L).

B. *Fire Alarm Products Offered For Sale*

11. Figgie-Interstate is now and has been, at all times relevant to the complaint, engaged in the manufacture of fixed-temperature heat detectors which are sold for the purpose of providing fire warning protection to residential occupants (CX 135, Admission Nos. 1 and 12).

12. Figgie-Interstate, at all times relevant to the complaint, has purchased the smoke detectors it sells from outside manufacturers (Sterner 1620).

13. Since 1971, Figgie-Interstate has offered for sale and sold Vanguard heat detectors containing either a 136° or a 175° fuse (Sterner 1614). An improved, 117° fuse was first offered for sale in April 1982 (CX 94A; Sterner 1614). In August 1983, the 117° fuse became the standard fuse used in a Vanguard heat detector (Sterner 1615).

14. Figgie-Interstate also offers for sale and sells both A.C.-D.C. photoelectric smoke detectors and battery operated ionization smoke detectors (CX's 93, 71Z-11). The photoelectric smoke detector currently sold by Figgie-Interstate is designed to activate once smoke density reaches approximately 1.5% (CX 64W).

C. Marketing Of Heat And Smoke Detectors

15. Figgie-Interstate offers for sale and sells Vanguard heat and smoke detectors to distributors located nationwide (CX 135, Admission No. 7; McGee 604) who in turn sell the products through in-home sales presentations to consumers (McGee 609; Hammack 231). Figgie-Interstate has a contractual relationship with these distributors (McGee 645).

16. Between January 1, 1981 and May 31, 1983, Figgie-Interstate has generated about \$2,354,000 in heat detector [5] sales. For the same time period, Figgie-Interstate has generated about \$620,000 in smoke detector sales (CX 127).

17. The standard package of heat and smoke detectors sent by Figgie-Interstate to distributors contains either five heat detectors and one smoke detector or six heat detectors alone (Schoettler 1269).

18. Sales figures from January 1, 1979 to May 31, 1983 indicate that Figgie-Interstate sells between four and five heat detectors for every smoke detector sold (CX's 127A, 125). Interstate currently sells both the 136° and 117° heat detector to distributors for \$32.75. Interstate charges distributors \$46.00 per unit for the smoke detectors (CX 127B). The testimony of Vanguard fire alarm purchasers called as respondent's witnesses indicate that they paid about \$100 per detector (Gwinn 1483; Hodja 1514) and have bought about five heat detectors for every one smoke detector (Hartley 1477; Shaw 1556; Hodja 1506; Gwinn 1477; Losito 1464).

19. Figgie-Interstate, in the regular course of its business, receives and maintains owner registration cards from distributors indicating the name and address of the purchaser, the number of Vanguard alarms installed, the purchase date and the name of the distributor responsible for the sale (CX 79; Hammack 2591).

20. Figgie-Interstate prepares, produces, and supplies promotional materials for use by its distributors during in-home sales presentations (CX 136, Amended Answer to Requested Admission No. 9; McGee 626-27, 632, 644; Hammack 212, 214, 218, 247, 250, 252). These materials contain detailed elements of the sales presentations to be made to consumers (Hammack 215; McGee 626).

21. Figgie-International, in the course and conduct of its business, and at all times relevant to the complaint, has exercised substantial control over the promotional practices of its distributors regarding the sale of Vanguard heat and smoke detectors, including the content of the sales presentation.

22. Until 1981, Interstate had relied upon a hierarchy of distributors referred to as divisional, regional and factory-direct. Divisional distributors had the largest sales territories and oversaw the activi-

ties of regional distributors. In turn, regional distributors were responsible for the factory-direct distributors operating within their respective regions. Figgie-Interstate paid a commission to divisional and regional distributors based on the purchase volume of those distributors for whom they were responsible (McGee 604-05, 608). Factory-direct distributors frequently establish subdistributors whom they supply (Hammack 206). [6]

23. During 1981, Interstate made all existing distributors factory-direct distributors. This change was prompted by Interstate's decision that divisional and regional distributors were not "giving them enough help" (McGee 608).

24. All factory-direct distributors, appointed by Figgie-Interstate, are assigned a primary area of responsibility as stipulated in a written agreement with Figgie-Interstate (Schoettler 1268; McGee 603). Figgie-Interstate also establishes sales quotas for those areas of primary responsibility (Schoettler 1268; CX's 85, 135, Admission No. 16).

25. Figgie-Interstate maintains a substantial role in the training of its distributors. It is recommended to all distributors that they rely upon the two-volume training manuals (CX's 64-65) for detailed information relating to hiring and training of their salesmen, and for sales presentations including scripts for opening and closing the sales presentation, lead generation and product information (Schoettler 1259; Sterner 1655). To date, Figgie-Interstate has sold about 5,000 copies of CX's 64 and 65 to its distributors (Interrogatory No. 34).

26. Figgie-Interstate holds regular sales meetings for Vanguard distributors where they are instructed by Figgie-Interstate personnel about sales presentations, lead generation and recruiting of sales people (CX's 87, 91-92, 96-97, 9P, 99-100).

27. Figgie-Interstate personnel regularly travel to various regions of the country to instruct distributors on how to stimulate sales and to show them how to do a proper sales presentation (Sterner 1656; CX 135, Admission No. 42; McGee 611). Distributors are further monitored by regular telephone calls from Interstate's Vice President for Marketing and its National Sales Director (Sterner 1660; CX 135, Admission No. 71).

28. Prior to November 1979, Interstate hired consultants, often known as National Trainers, to visit various distributorships and instruct them on such matters as day-to-day operation of the business, marketing of products and product information (CX 135, Admission No. 63; McGee 610).

29. On occasion, Figgie-Interstate instructs its distributors to memorize scripts prepared by Interstate for use in sales presentations (CX's 64Z-13, 88; Sterner 1655).

30. On occasion, distributors and Interstate personnel work to-

gether to develop new promotional material including the script for the slide presentation released by Figgie-Interstate in January 1983 (CX 135, Admission No. 59).

31. In order to stimulate sales, Figgie-Interstate sponsors sales contests among distributors and establishes award programs (CX 135, Admission Nos. 44 and 74). Figgie-Interstate has [7] provided funds to pay some of distributors' costs for advertisements recruiting salespersons (CX 89, 135, Admission No. 77).

32. In the course and conduct of its business, and at all times relevant to the complaint, Figgie-Interstate has produced and disseminated promotional materials which constitute a major portion of the sales presentation made by Vanguard distributors to consumers (Hammack 215; McGee 626).

33. Most of the promotional materials prepared, produced and distributed by Figgie-Interstate contain performance claims relating to Vanguard heat detectors (CX 136, Amended Response to Requested Admission No. 11; CX's 61C, G, 63, 66, 67M-N, P, S, 68B, 69C-D, 70B, E, G, 71Z-10, Z-12).

34. A method nationally employed by Vanguard distributors and recommended by Figgie-Interstate for purposes of generating sales leads included the offer of a free fire extinguisher to consumers who had filled out a registration card giving his or her name and address. The cards were deposited into drop boxes located in retail outlets and at trade fairs and were subsequently used by local Vanguard distributors to schedule sales presentations (CX 64Z-20; Hammack 228; Hodja 1504).

III. FIGGIE-INTERSTATE'S SALES PRESENTATION AND PROMOTION OF VANGUARD FIRE ALARM DEVICES

35. The sales presentation consists largely of promotional materials supplied to distributors by Figgie-Interstate. These in-home presentation materials include slide shows, testimonial letters, brochures and booklets, demonstration materials, government fire study excerpts and other materials, all intended to drive home the real danger of home fires and to induce the consumer to purchase Vanguard heat detectors, often in a system including a token number of smoke detectors. Figgie-Interstate recommends that heat detectors be installed in every room, including living rooms, bedrooms, kitchens, dens, basements, attics and garages; and perhaps a smoke detector outside the sleeping areas (CX 66M, 135, Admission No. 27; Sterner 1620).

A. *The Slide Presentation*

36. An important element of the sales presentation is a slide presentation with a synchronized audio tape, entitled "Home Safety Pro-

gram," which is prepared and disseminated by Figgie-Interstate. There have been two editions of the slide show. The first, CX 131 (CX 129, audio tape for old slide show; CX 130, transcript of CX 129), was in use from 1980 until early 1983. The second, CX 133 (CX 132, audio tape for new slide show; a [8] transcript of CX 132 appears on Tr. 1586-1604), has been in use since January 1983 (CX 135, Admission No. 59; Hammack 234; McGee 640, 644). Interstate's Vice President of Marketing, Irv Sterner, is of the opinion that the new slide presentation produced by Figgie-Interstate is the most effective piece of promotional material provided to Vanguard distributors for use during in-home sales presentations (CX 135, Admission No. 50).

37. According to Sterner, the new slide presentation (CX 133) is "totally different" from the old slide show (CX 131). Dr. Cohen, complaint counsel's expert witness, viewed both versions and characterized them as very similar in content and impact (Cohen 305-08). The evidence shows that the number of slides were reduced from 100 in the old version to 90 in the new, 64 of the old 100 slides were removed together with corresponding audio and, of the remaining 36 slides the accompanying audio was changed in many of them (Sterner 1573-74). The administrative law judge had occasion to view both versions and came away with a distinct impression that both versions conveyed a similar message regarding the real danger of night-time fires in homes and the effectiveness of Vanguard heat detectors as early warning devices, which have saved many lives.

38. The slide shows vividly depict residential fires, homes engulfed in raging flames and choking smoke and show alarming fire statistics regarding the real danger of night-time residential fires. In one fearful fire scene after another, the viewer is shown what a reliable fire warning device like Vanguard heat detector can do to save lives and property in residential fire situations.

39. The audio portion of the new slide show (CX 133) contains the following express representations:

a. The information you are about to hear may mean the difference between life and death for your family. So listen more carefully than you have ever listened before (Tr. 1587).

b. The purpose of our visit is to tell you how fires start, how they spread and, most important, how to survive (Tr. 1588).

c. Authorities say there are two things necessary to save you and your family in case of fire. "The first is adequate warning" (Tr. 1590).

d. When your fire occurs, it could be at night, the real danger time for your family. The vast majority of fire fatalities occur between the hours of 11:00 p.m. and 6:00 a.m. when most people are sleeping. Not more fires, more fire deaths (Tr. 1594). [9]

e. The most feared [toxic by-product of fire is] carbon monoxide. The gas is produced in abundance in every fire. It is odorless, colorless, and tasteless. A very short exposure

to this gas will not only induce sleep, but render you unconscious and, finally, death (sic; Tr. 1596).

f. However, regardless of the physical cause of fire fatalities, the real killer is time. If every family were warned of the fire in time, nighttime fire deaths and injuries could be virtually eliminated (Tr. 1598).

g. Under normal conditions with the bedroom door open a family had just 1.8 minutes from the time a fire started until it was too late. Even closing the bedroom door only gave them 5.6 minutes (Tr. 1598).

h. Imagine if an early warning system existed for your car that could warn you minutes before a fatal crash. We would all want one. A system like that of course does not exist. Yet, an early warning system does exist that will warn you minutes before a fatal fire condition exists in your home (Tr. 1599).

40. The audio portion of the old slide show (CX 130) contains the following express representations:

a. A few months ago we had a serious fire in our home that resulted in a financial loss and a much greater loss, the life of our nine year old son. We had one smoke detector and a false sense of security. The fire we had was so hot that by the time the smoke detector sounded it was too late. We now realize that to have adequate protection the home must have heat detectors as well as smoke detector (CX 130C).

b. We suggest that you watch the film and draw your own conclusions as to whether you want the protection provided by a cheap smoke detector or the protection offered by a combination system (CX 130C).

c. As the oxygen content in the air is burned up and the carbon monoxide increases your senses are gradually dulled so that you sleep more soundly. This is one of the main causes of residential fire fatalities (CX 130D). [10]

d. They die because the fire is not discovered in time for them to get out (CX 130E).

e. Vanguard can give you that extra measure of life safety when the fire starts (CX 130F).

f. We know we had made the right decision as we heard the life saving sound of the heat detector which warned us of an overheated furnace. Without this protection the result could have been a tragedy (CX 130F).

g. Tests show that you may have as little as 1.8 minutes to escape with your life (CX 130G).

h. We have all ready [sic] saved thousands of lives and million of dollars in property (CX 130M).

i. Numerous fire authorities recommend the Vanguard system (CX 130M).

j. Chief Joe Armstrong of the Andover Fire Department, Chief Boyd Tuttle, Columbia Fire Department and Chief Ray Gergeler, Eagleville Fire Department witness the activation of the first alarm only 15 seconds after the start of the fire in a demonstration house fire. The heat detector located on the ceiling at the top of the adjoining room activated only five seconds after the first detector. The third heat detector located on the ceiling at the top of the stairwell activated four seconds later. It took nearly 33 seconds for the smoke detector to activate (CX 130M).

k. Automobile accidents kill thousands of people each year just as fire does. If you could get a device that you could put on your car to let you know two or three minutes before you have a wreck to allow everyone to get safely out of the car, would you want one? Certainly you would. Everybody knows there is no such device for cars but there is for fire. That is exactly what Vanguard is (CX 130N).

B. Promotional Brochures And Booklets

41. CX 61, entitled *Disneyland Hotel is a Pioneer in Life Safety (Disneyland Hotel)* is a 8-page promotional piece copyrighted by Interstate Engineering in 1981, 1982 and 1983. The cover page bears, in addition to the title, a large [11] photograph of the Disneyland Hotel. During the in-home sales presentation, Vanguard distributors make CX 61 available to prospective purchasers (Hammack 247; McGee 638). Interstate produces and distributes CX 61 and has sold about 14,000 copies to its distributors (CX 61, Interrogatory No. 34). Irv Sterner, Interstate's Vice President of Marketing, is of the opinion that CX 61 is the third most effective pieces of Vanguard heat detector promotional literature (CX 135, Admission No. 51).

42. CX 61, *Disneyland Hotel*, purports to report the results of an activation test of 175 Vanguard heat detectors that had been in use in the Disneyland Hotel in Anaheim, California, since January 1960. The test was conducted at Interstate's facilities on October 16, 1980 (CX 61C).

43. According to CX 61, in this first-time-anywhere, large-scale "dependability test" of mechanical heat detectors, all of the 175 Vanguard heat detectors, each of which had remained at its installation site without service for as long as 20 years, "responded within the designated temperature range by sounding a loud alarm lasting four and five minutes."

44. CX 61C also contains the following statements:

This proof of long-term dependability did not surprise the manufacturer. VANGUARD heat detectors came into existence in 1959 and since then Interstate Engineering has received over one thousand letters evidencing the saving of thousands of lives through the use of millions of VANGUARD heat detectors.

The VANGUARD heat detectors used in the activation had been installed in the two-story garden style guest rooms of the Disneyland Hotel in January, 1960 and since VANGUARD heat detectors do not require maintenance, each remained at its installation site without service. The Disneyland Hotel estimates that, since the heat detectors were installed, 4,343,255 people have stayed in rooms having VANGUARD heat detectors. Because the heat detectors performed so well, the Disneyland Hotel installed the latest model of the VANGUARD Thermosonic Heat Detector (as well as a smoke detector) in each room already having a VANGUARD heat detector when those rooms were remodeled.

Interstate Engineering also markets VANGUARD smoke detector alarms, fire escape ladders and fire extinguishers. [12]

45. CX 61C, which is followed by three pages of photographs, bears a notation printed in bold types, at the bottom of the page, which reads:

IMPORTANT

The presence of representatives from the Disneyland Hotel, the Los Angeles County Fire Department and the Orange County Fire Department in no way represents an endorsement of the items tested.

The United States Government, fire authorities, Interstate Engineering (a Figgie International Company), and VANGUARD distributors strongly recommend the installation of an adequate number of early fire warning detection devices.

46. The following page, CX 61D, shows two photographs. The top half of the page shows a large number of heat detectors arranged on a long table. Standing behind the table is a small group of men. The legend to the left of this photograph reads: "Participating in the test were IEC personnel and Captain Richard Schiehl, (third from right) Los Angeles County Fire Department and Fenton Hill, (second from right) Disneyland Hotel." The bottom half shows a partial view of a table bearing several rows of heat detectors and two uniformed officers, standing behind the table, and one examining a detector held in his hands. The legend to the left of this photograph reads: "(l-r) Captain Richard Schiehl, Los Angeles County Fire Department and Captain Charles Pister, Orange County Fire Department timing the four to five minute alarm cycle."

47. CX 61E shows two photographs. The top half of the page shows a man, standing by a table bearing a number of heat detectors, examining a detector held in his hands. Standing next to the man is a uniformed officer holding a notepad in one hand and looking at the detector hand-held by the other man. The legend to the right of the picture reads: "Captain Charles Pister, Orange County Fire Department and Fenton Hill, Disneyland Hotel observing the condition of the VANGUARD heat detectors prior to the test." The bottom half of the page shows a long display table bearing rows of heat detectors and a man holding a hair-dryer like apparatus over a heat detector. Opposite him across the table stands a uniformed officer looking on and picking up a heat detector. The legend to the right reads: "(l-r) John Kelly, IEC director of consumer relations activating VANGUARD heat detectors while Captain Richard Schiehl of the Los Angeles County Fire Department checks the gauge type thermometer in order to note the temperature at which the activation occurs." [13]

48. CX 61G contains the following statement:

New VANGUARD heat detector alarms were recently installed in the Garden Villas at The Disneyland Hotel.

Features that made early models of the VANGUARD heat detector so reliable have been maintained while some outstanding improvements have been made. VANGUARD'S latest innovations over the heat detectors formerly in use at the Disneyland Hotel include:

- A doubling of the sensitivity range
- Increased escape time due to a faster response time
- The decibel level of the alarm has been raised
- The duration of the alarm sound has been increased
- The state of fail-safe readiness is assured because the heat detector cannot be fused unless the alarm is fully powered.

The Disneyland Hotel now has the benefit of all these improvements in their heat detectors, and in addition smoke detectors have also been installed.

49. The top half of the last page, CX 61H, shows a large photograph of a five heat detector/one smoke detector configuration. The legend which appears below the photograph reads:

VANGUARD Thermostatic Heat Detector Alarms and VANGUARD Smokesonic
Smoke Detector Alarm

50. CX 63 is a one-page promotional piece styled as a red-letter news release bulletin directed to Interstate distributors, issued in July 1978, and features quotations attributed to a U.S. National Bureau of Standards official. The headline quotation reads: "HEAT DETECTORS HAVE PROBABLY SAVED MORE LIVES AND [14] PROPERTY THAN ANY OTHER FIRE DETECTION DEVICE." The narrative portion of this "news release bulletin" prints two quotations purportedly taken from a speech by Richard W. Bukowski, U.S. Bureau of Standards, Center for Fire Research, given at the National Fire Protection Association (NFPA) Annual Meeting in Anaheim, California. The bulletin then states:

We are pleased to see the U.S. National Bureau of Standards recognize these important facts. Those of you who have been protecting families with Vanguard know from first-hand experience how true these National Bureau of Standards statements are. They exactly summarize the position Vanguard has taken in recommending "combination systems" through the years.

It means the **only** way to provide complete and sure fire-warning protection is by using both smoke detectors and heat detectors, by using completely non-electrical devices in addition to the electrical devices and by combining long-lived reliability with timely response.

If one is **not** going to have a fire, it is a total waste of money to install even one detector. But, if one **is** going to have a fire, he had better have complete and sure fire-warning protection. At the present state-of-the-art, there is no other way to accomplish this except with a "combination" system of smoke detectors guarding the approaches to the bedrooms and mechanically-powered heat detectors in the other major rooms.

51. During the sales presentation, Vanguard distributors make CX 63 available to prospective purchasers (Hammack 247). Interstate prepares and distributes CX 63 (CX's 63, 77B).

52. CX 67, entitled *The Purpose of My Visit* is a promotional piece used by Vanguard distributors and made available to consumers during in-home sales presentations and contains materials copyrighted between 1973 and 1980 (CX 67; McGee 628). CX 80 is an updated version of CX 67 (McGee 631) and contains similar material with a few changes. Figgie-Interstate prepares and produces CX 67 and CX 80 and has sold about 4,200 copies to date (CX 136, Interrogatory No. 34).

53. CX 67 and CX 80 contain the following express representations:
[15]

a. The cover page announces the purpose of a salesman's visit to be (CX's 67A, 80A):

To present your family vital life saving information on home fire safety.

To give information on what to do in the event a fire strikes your home.

To show you outstanding products that could benefit you and your family for many years.

b. CX 67D and CX 80E are identical and headlined "Fire Can Happen To You" and state:

Of the nearly 1 million building fires that occurred in 1971, almost seven out of ten occurred in residential occupancies. The chances are that the average family will experience one fire every generation serious enough to have the fire department respond. Residential fires account for about half of all fire deaths and a third of all property losses. (If the losses from non-building fires are excluded, residential fires account for about 87 percent of the deaths and 39 percent of these property losses.)

The right-half of the page is devoted to a graphic percentage comparison of life losses, property losses and number of fires between residential and non-residential fires.

c. CX 67G and CX 80H are identical and headlined "Night Time Is The Danger Time" and feature the following message:

The large percentage of multiple death fires occur between the hours of 11 p.m. and 6 a.m. when most people are asleep. . . .

d. CX 67I and CX 80J are identical and headlined "The National Commission Reports 'HOW TO DIE IN A FIRE'" and lists asphyxiation, attack by superheated air or gases, smoke, toxic products [16] and flames, and concludes "The Real Killer Is Time."

e. CX 67L and CX 80L are identical and headlined "There Is a Solution." These pages then show "recommendations" of the Report of the National Commission on Fire Prevention and Control. One excerpted paragraph reads in part:

The National Fire Protection Association, the Department of Housing and Urban Development, and the International Association of Fire Chiefs, among others, support the use of early warning detectors in homes. . . . At a minimum, most advocates feel, there should be an early-warning detector on the ceiling near each sleeping area in the house. Some believe a system of heat detectors is an adequate substitute, but only if there are many more of them located throughout the house. . . . The Commission urges Americans to protect themselves and their families by installing approved early-warning fire detectors and alarms in their homes.

f. CX 67M and CX 80M are identical and purport to present a "Life Safety Plan" recommended by Interstate. The recommended plan consists of:

- Home fire safety education
- Fire escape plan (operation EDITH)
- Home inspections for fire hazards
- An Early Warning System to detect hot fires and smoldering fires in the very early stages.

g. CX 67N and CX 80N contain similar material and both prominently feature a photograph of a Vanguard heat detector. In CX 80N, the textual material is printed below a headline "UNEQUALED RELIABILITY" and reads as follows: [17]

- Limited 25-year warranty
- Self-contained—no wires or batteries
- High sound warning level
- Multiple temperature rating
 - 117°—70 ft. space rating
 - 136°—50 ft. space rating
 - 175°—50 ft. space rating
- Sealed and permanently lubricated
- Protected against corrosion
- Listed by "UL" of U.S.A., "ULC" of Canada and California State Fire Marshall
- Endorsements by many fire authorities
- Over one thousand testimonial letters from thankful Vanguard owners
- Over four million Interstate alarms installed
- A confirmed leader in residential fire detection
- Quality engineering

h. CX 67O and CX 80P both prominently feature a photograph of Vanguard Smokesonic 8-22 AC-DC smoke detector but each employs a slightly different format. CX 80P characterizes the photo electric smoke detector as "the ultimate in SAFETY, QUALITY and DESIGN," and then the product features as follows:

- Two Power Sources for 24 hour protection
- Space age technology
- LED light source (Estimated 40 year life)

- Utilizes solid state components [18]
- Will not alarm to gases or to aerosols other than smoke
- Transformer reduces voltage within detector to a safe 9 volts
- Will not false alarm to high air flows
- Fast response to a slow smoldering fire
- Minimum maintenance required
- U.L. listed

i. CX 67P and CX 80Q are identical and are headlined "TYPES OF FIRE PROTECTION—THE CHOICE IS YOURS!" The left half of the page purports to compare the various features of available devices and appears to suggest the best way is a Vanguard mechanical heat detector/smoke detector combination system. The right half of the page is devoted to a photographic presentation of what appears to be a five heat detector/one smoke detector "Vanguard Combination System." This photograph (CX 67Q and CX 80Q) of a five heat detector/one smoke detector configuration appears to be identical to the full-page photograph on CX 71Z-13, another Interstate promotional piece, discussed hereinafter.

j. CX 67Q is headlined "A Basic Early Warning System for the Average Home" and purports to illustrate, using a vertical diagram (house plan) and a horizontal floor plan, recommended locations where heat detectors and smoke detectors may be installed. The vertical diagram shows one smoke detector in the upper level bedroom and one smoke detector in the top of a stairwell between two lower level bedrooms. The floor plan diagram shows one heat detector in the kitchen, one heat detector in each of the three bedrooms, one heat detector in the utility room, one heat detector in the living room (making up six heat detectors in all) and one smoke detector in the central hallway. The textual material [19] appearing to the left of the diagrams reads:

While full protection calls for adequate heat and smoke detectors in all rooms and in all other enclosed areas where fire can occur, such a system is not always economically possible for the homeowner.

One of the most important factors to consider in a home fire alarm system installation is the location, type, and number of the fire detecting devices.

While it is logical to assume that partial protection can provide some degree of life safety, it should be the goal of every family to protect themselves to the very best of their ability with adequate heat and smoke detection devices.

This page (CX 67Q) was evidently deleted from the updated version, CX 80.

54. CX 68, copyrighted in 1980, is a promotional brochure entitled *Are Smoke Detectors Really Enough Protection From Fire?* CX 68 is

used by Vanguard distributors to generate sales leads (McGee 632; Hammack 249). It is prepared and disseminated by Figgie-Interstate and about 2,500 copies have been sold to distributors (Interrogatory No. 34).

55. CX 68B and C appear to answer the question "are smoke detectors really enough protection from fire?" in the negative, by pointing out, in bold types, that "SMOKE MAY NOT REACH THE DETECTOR," "SMOKE DETECTORS ONLY RESPOND TO CERTAIN TYPES OF FIRES," "ELECTRONIC DEVICES ARE SUBJECT TO MALFUNCTION," "POWER SOURCES MAY FAIL," and "SMOKE DETECTORS CAN FAIL WITHOUT NOTICE." The above material is followed by a statement:

Smoke detectors save lives and Vanguard smoke detectors are of the best quality. Yet, people who have depended only on smoke detectors as an early warning device have been injured and died as a result of fire. It is possible that some of the victims may have experienced a false sense of security previous to their fire. [20]

To the lower right of the above-quoted statement appears the following statement printed in a boxed frame:

NO VANGUARD OWNER HAS EVER DIED IN A FIRE AS A RESULT OF A VANGUARD MECHANICAL HEAT DETECTOR PRODUCT FAILURE. NO SMOKE DETECTOR CAN MATCH VANGUARD'S LONG TERM RECORD OF DEPENDABILITY (CX 68C).

To the left of the above boxed statement appears the following statement:

A BETTER WAY

Mechanical heat detectors are essential to provide the reliability that smoke detectors lack and to guard against the many types of fires where smoke detectors may be ineffective. VANGUARD distributors support the approach expressed by a top expert in the United States National Bureau of Standards Center for Fire Research. That is: The systematic combination of various types of detectors to maximize chances of fire survival.

VANGUARD has received well over a thousand letters and fire reports from families who might not be alive today if it had not been for VANGUARD mechanical heat detectors. These testimonials clearly indicate that a carefully planned system that includes an adequate number of mechanical heat detectors is a sensible and proven method (CX 68B).

56. CX 69, copyrighted in 1981 and 1983 by Interstate, is a promotional brochure entitled *If You're Serious About Fire Protection, Install Vanguard, The Reliable Combined Fire Protection System*. Figgie-Interstate prepares and distributes CX 69 to Vanguard dis-

tributors, who in turn use it during in-home sales presentations (Hammack 250; McGee 638). To date, Interstate has sold 6,000 copies of CX 69 to distributors (Interrogatory No. 34).

a. CX 69A prominently features the now familiar photograph of a five heat detector/one smoke detector combination, [21] which also appeared in CX 71Z-13, CX 67P and CX 80Q, discussed hereinabove.

b. CX 69C contains the following statements:

NFPA 74 was revised in 1974. It incorporated in the NFPA Standard the four levels of protection. These depict the importance of incorporating the concept of reliable heat detectors with an approved smoke detector as a part of the complete system.

1975 - The National Fire Prevention and Control Administration published Highlights of the National Household Fire Survey. It showed the danger areas where solutions must be found.

We feel a practical solution would be to give early warning in areas where most fires start.

Below the above statements appears a graphic presentation showing where household fires start, including such locations as kitchens, bedrooms, basements and bathrooms. A statement printed below the graph reads: "Kitchen fires involving cooking constitute 40% of all household fires. Non-cooking kitchen fires account for another 25% of the total."

The material printed in the right column of CX 69C includes the following statements:

Due to high fire incidents in these areas, there must be provided U.L. approved type heat detectors which will give immediate early warning. The "VANGUARD" 50-FT. rated heat detector will provide reliable, service-free, long-lasting protection in these critical fire areas.

* * * * *

The "VANGUARD" Thermosonic 50-FT. Heat Detector and the "VANGUARD" Smokesonic Smoke Detector will provide the combination needed to give a greater measure of life safety. This [22] system, when properly installed per the recommendations set forth in the latest edition of NFPA 74, constitutes the finest system on the market today!

c. CX 69D refers to "NFPA Standard No. 74" and gives the Fire Equipment Manufacturers' Association "recommendations":

Since 1967, the National Fire Protection Association Standard No. 74 has required fire detection equipment to warn against fire in the home. The Fire Equipment Manufacturers' Association, Inc. (FEMA) endorses this requirement in general. . . .

Because of the infinite number of variables involved, and because of differences in judgment as to what constitutes "adequate" protection, this question may not be precisely answered. However, general guidelines have been established by FEMA.

The Fire Equipment Manufacturers' Association, Inc. (FEMA) recommends:

1. That one smoke detector be installed to guard each separate sleeping area. (A "separate sleeping area" comprises the hallway and all the bedrooms opening onto that hallway.)

2. That both smoke detectors and self-contained, mechanically powered heat detectors be used in every household fire warning system and that neither type ever be used alone.

* * * * *

Every fire warning system for homes should include both heat detectors and smoke detectors, properly applied, and located in accordance with their best usage. [23]

57. CX 70, entitled *Highlights of Over One Thousand Vanguard Activations in Real Fire Situations*, is a promotional brochure copyrighted by Interstate in 1981 and 1983. It purports to present in chart form "pertinent information" based on some "1,107 letters about Vanguard residential fire alarms in real fire situations which occurred between 1959 and 1980" (CX 70A-B). The express statements and graphic presentations contained in CX 70 include the following:

a. In the interest of the life safety of those who depend only on smoke detectors as an early warning device, we feel that the following information as revealed in this brochure should be especially noted:

734 of the reported fires were due to heating, cooking and electrical fires. (Chart A). The figures suggest that these types of fires might be responded to best by heat detectors.

569 of the reported fires started in kitchens, furnance [sic] rooms, garages or attics (Chart B). The National Fire Protection Association publishes, "NFPA No. 74-1980 Standard for the Installation, Maintenance, and Use of Household Fire Warning Equipment" which states, "The installation of smoke detectors in kitchens, attics (finished or unfinished), or in garages is not normally recommended as these locations occasionally experience conditions which may result in improper operation" (CX 70B).

b. We are glad to know that VANGUARD heat detectors installed during the past twenty years, and even earlier, are still protecting people today. We estimate that the number of people VANGUARD has warned of a fire situation could be as much as ten times higher than our testimonial letters indicate. This belief is based on the fact that in 1980 alone we had more than 2,000 requests for replacement fuses for VANGUARD heat detectors. In most instances, when a fuse needs to be replaced, it is usually because a fire [24] has occured [sic] and the fuse has activated (CX 70B).

c. Therefore, on the basis of the information in this brochure, we are confident you will agree with Interstate—that for maximum life safety—the VANGUARD combination system of heat and smoke detectors should be in every home. **We think deaths, injuries and property losses related to home fires would decrease dramatically if everyone followed the guidelines in the booklet, "NFPA No. 74-1980 Standard for the Installation, Maintenance, and Use of Household Fire Warning Equip-**

ment." The latest edition of this booklet can be purchased at nominal cost from the National Fire Protection Association, Batterymarch Park, Boston, Massachusetts 02269 (CX 70B).

d. CX 70G prominently features in the center of the page a photograph of five heat detector/one smoke detector configuration under a headline caption across the top of the page, which reads:

**IF YOU'RE SERIOUS ABOUT FIRE PROTECTION INSTALL VANGUARD
THE RELIABLE COMBINED FIRE DETECTION SYSTEM**

CX 70G format is identical to CX 69A. Similar photographs of five heat detector/one smoke detector combination also appear in CX 61H, CX 67P, CX 71Z-13 and CX 80Q.

58. CX 71 is a 42-page booklet used by Vanguard distributors in their sales presentations to consumers. CX 71, copyrighted in 1981, is produced and distributed by Figgie-Interstate (CX 71; Hammack 240; McGee 634). CX 71 was first made available in March of 1982; approximately 100 have been sold to distributors since that date (Hammack 210; Interrogatory No. 34).

59. CX 71 purports to present "the home fire problem," drawing upon authoritative sources of information, and advises what can be done about it by the use of Vanguard heat detectors and smoke detectors. The source of information is given as: (1) National Fire Protection Association ("NFPA"); (2) U.S. Government sources; (3) Leading fire authorities; and (4) documented incidents (CX 71D). Most of the textual material is printed over photographic montages and paintings depicting [25] leaping flames, a sleeping woman, burning appliances and stairways and a toy-strewn nursery engulfed in flames.

60. CX 71 contains many express representations in textual matter. The following are illustrative:

a. Night Time Is The Danger Time

The large percentage of multiple death fires occur between the hours of 11 p.m. and 6 p.m. when most people are asleep. . . . (CX 71S).

b. SECONDS CAN COUNT

Once on the loose, within a minute after, a fire can reach 1000 F. The time span of 2 to 4 minutes, from first flames to deadly conditions is not unusual (CX 71U).

c. IN A HOME FIRE

Bedrooms some distance from the fire can become death traps in 2 minutes. Two minutes is just about the length of time you would need to rouse your children and get them out of the house. Source: NFPA Bulletin FR 72-2 (CX 71V).

d. The Commission [National Commission on Fire Prevention and Control] urges Americans to protect themselves and their families by installing approved early warning fire detectors and alarms in their homes (CX 71Z-6).

e. EXPERTS AGREE

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Initial Decision

The Ideal Residential Fire Detection System Must Meet These Requirements:

- One: Sensitivity
- Two: Self Contained
- Three: Portable
- Four: Lifetime of Protection

(CX 71Z-8).

f. CX 71Z-9 is devoted to a large photograph of a heat detector, identified on the top as "Vanguard Thermosonic Heat Detector." Next follows a full-page of textual material, printed in large, bold types, which reads: [26]

UNEQUALED RELIABILITY

- Limited 25-year warranty
- Self-contained—no wires or batteries
- High sound warning level
- Multiple temperature rating
 - 117°—70 ft. space rating
 - 136°—50 ft. space rating
 - 175°—50 ft. space rating
- Sealed and permanently lubricated
- Protected against corrosion
- Listed by "UL" of U.S.A., "ULC" of Canada and California State Fire Marshall
- Endorsements by many fire authorities
- Over one thousand testimonial letters from thankful Vanguard owners
- Over four million Interstate alarms installed
- The confirmed leader in residential fire detection
- Quality engineering

g. CX 71Z-10 is devoted to a large photograph of a VANGUARD Smokesonic, designated as 8-22 A.C.-D.C. This page is followed by a full-page textual matter which reads:

Photo Electric Smoke Detector

The ultimate in SAFETY, QUALITY, and DESIGN.

- Two Power Sources for 24 hour protection
- Space age technology [27]
- LED light source (Estimated 40 year life)
- Utilizes solid state components
- Will not alarm to gases or to aerosols other than smoke
- Transformer reduces voltage within detector to a safe 9 volts
- Will not false alarm to high air flows
- Fast response to a slow smoldering fire
- Minimum maintenance required
- U.L. listed (CX 71Z-11).

h. CX 71Z-12 purports to compare different types of fire protection

devices, including sprinkler system, electrical heat detectors, battery-operated heat detectors, ionization-battery-operated smoke detectors, photoelectric 110 volt smoke detectors, mechanical heat detectors, and photoelectric LED/AC-DC smoke detectors, and suggests "the best way" to be "The Vanguard Combination system" of mechanical heat detectors and photoelectric LED/AC-DC smoke detectors. The textual matter for the combination system reads:

THE BEST WAY
The Vanguard Combination System

Mechanical

- Portable
- No maintenance
- No false alarms
- 25 year warranty
- Inexpensive long term cost
- Fast response to hot fires
- Millions installed
- Thousands of lives saved

Photoelectric

- L.E.D./A.C.-D.C.
- No false alarms
 - Two power sources for 24 hour protection
 - Can be installed in most locations
 - Light emitting diode has an estimated 40 year life
 - Transformer reduces voltage to a safe nine volts
 - Energy efficient
 - Fastest response to slow smoldering fires [28]

i. The above presentation is followed by a full-page photograph showing a five heat detector/one smoke detector configuration of the combination system, under the caption "THE CHOICE IS YOURS!" (CX 71Z-13).

61. At the conclusion of each sales presentation, Vanguard distributors also use testimonial letters provided to them by Figgie-Interstate in order to persuade the prospective purchaser (CX's 72, 76; Hammack 253; Sterner 1660, 1667).

C. The Cardboard House Demonstration (CX 81)

62. During the sales presentation, Vanguard distributors perform a demonstration of how a Vanguard heat detector works. This demonstration involves placing a lit candle inside a cardboard house (CX 81), a piece of tissue serving as the roof of the house, and the heat detector is placed directly on top of the tissue. Within seconds the heat detector alarm is activated while the tissue remains unscorched. Interstate recommends that its distributors perform this demonstration and provides them with the cardboard house and a script that they are told to memorize. Interstate first offered the demonstration house in May 1981. To date, 1,900 have been sold to Vanguard distributors (Interrogatory No. 34; CX 88A, C; Hammack 240, 246).

D. *The Warranty Book* (CX 66)

63. CX 66, entitled *Safe at Home*, is a 23-page warranty book which, at the conclusion of a successful in-home presentation and sale, is left with a Vanguard heat detector purchaser. It contains Interstate's "fire replacement guarantee" and "limited 25 year warranty," together with various product information regarding Vanguard heat detectors and their installation (CX 66; Hammack 249; McGee 639). Interstate prepares and distributes CX 66 for use by Vanguard distributors. Some 650,000 copies of CX 66 have been sold to distributors (Interrogatory No. 34). CX 66 also contains useful information explaining how to conduct a home fire drill and family member instruction (CX 66S-U), planning fire escape plan (CX 66V) and a convenient "home fire safety check list" (CX 66W). CX 66 also contains the following statements:

a. "Vanguard" is skillfully engineered for highly reliable performance, and you have made a wise decision in selecting this equipment to help protect your loved ones. [29]

Fire can strike in countless ways, and there is no way to guarantee against injury or loss in a fire. "Vanguard," together with your Escape Plan and Fire Drills, is intended to help reduce the risk of injury or tragedy!

This booklet is designed to acquaint you with "Vanguard," the reasons for its development, and the Company behind the product. It will suggest sound methods to protect yourself and your family against the dangers of fire and what to do when fire strikes. Never forget that the one who can do the most to protect your family from fire is you! (CX 66E).

b. Interstate developed the "Vanguard Thermosonic" Alarm to help reduce the increasing loss of life and injuries from fire. A reliable, non-electric, non-battery heat detector was needed to warn of danger when fire occurred. Since the greatest loss of life occurs in the home, the "Vanguard Thermosonic" was designed specifically for the home (CX 66F).

c. There are two extremes of fire to which household fire warning equipment must respond. One is the rapidly developing, high heat fire. The other is the slow, smoldering fire. Either can produce smoke and toxic gases. The "Vanguard Thermosonic" Heat Detector is designed to detect abnormally high temperatures. The "Vanguard Smoke-sonic" Smoke Detector is designed to detect abnormal quantities of smoke. Every fire warning system for homes should include both heat detectors and smoke detectors, properly applied, and located in accordance with their best usage (CX 66F).

d. CX 66M is devoted to a section entitled "LOCATION AND QUANTITY OF HEAT DETECTORS AND SMOKE DETECTORS" and discusses NFPA Standard 74-1980. The textual material includes a lengthy quotation of NFPA Standard Section 2-1.1.1. Below the quotation appears the following: [30]

CAUTION:

The smoke detector(s) required by Section 2-1 of the NFPA 74 Standard will provide only partial protection. While it is logical to assume that the required partial protection

can provide a degree of life safety, it should be the goal of every family to provide themselves with the highest level of protection economically possible. You should consider the life safety involved and the level of protection best suited to you and your family's needs.

Additional heat detectors are recommended in the following areas: kitchens, living rooms (dens, family rooms, studies, recreation rooms, etc.), furnace rooms, basements, bathrooms and storage or porch areas, garages, laundry rooms and attics (CX 66M).

CX 66 also contain the following statements:

e. "Vanguard" Heat Detectors at the proper temperature rating may be installed in any room (CX 66"O").

f. The 50-foot "Spacing rating" of the "Vanguard Thermosonic" Model V-50 ft. Heat Detector means that Underwriters' Laboratories rates a single V-50 ft. detector as capable of monitoring rooms up to 50 by 50 feet in size for dangerous heat producing fires (CX 66P).

g. Of course, the rooms in most homes are much smaller than the 50' by 50' rating of the "Vanguard Thermosonic," but the higher thermal efficiency of the detector is not wasted in these small rooms. Instead, this extra protective range is translated into even faster activation and more time to escape and into more flexibility in the allowable locations for the detectors so that it can still monitor the entire room even when it is not mounted in the center of the room (CX 66Q). [31]

64. Interstate recommends to homeowners that heat detectors be installed in all major areas of the home including kitchens, living rooms, dens, family rooms, studies, recreation rooms, furnace rooms, basements, bathrooms, storage rooms, porch areas, garages, laundry rooms and attics (CX's 66M, 135, Admission No. 27).

65. Vanguard distributors are instructed by Figgie-Interstate to have consumers sign a release acknowledging that only "partial fire detection protection" has been purchased if less than the recommended number of heat detectors is ordered (CX 75; Hammack 257).

IV. FIGGIE-INTERSTATE MADE REPRESENTATIONS ALLEGED IN PARAGRAPH FIVE OF THE AMENDED COMPLAINT

A. *Standards For The Determination Of The Meaning of Advertisements*

66. In determining whether a sales presentation and promotional material discussed in Section III hereinabove made a particular representation, the appropriate standard is whether, taking the material individually or as a whole, the representation is a reasonable interpretation of that material. The question is whether the representation at issue is an interpretation of the material to which more than an insubstantial number of reasonable consumers would adhere. Since more often than not several reasonable interpretations of a

given material are possible, it is not necessary that the claim found to have been made be the only or the most reasonable interpretation of the material.

67. The primary evidence with respect to the meaning of the promotional materials is the representations contained in those materials, when considered individually or as a whole. The record also contains evidence as to the meaning of the promotional materials in the form of expert testimony provided by Dr. Joel Cohen.

68. In determining the issue of representations, I have primarily relied on my own knowledge and experience to determine what impression or impressions a promotional piece as a whole is likely to convey to a reasonable consumer. When my initial determination agreed with Dr. Cohen's testimony, I rested. When my initial determination disagreed with Dr. Cohen's testimony, I reexamined the material before reaching a final determination. I have not relied on Dr. Cohen's testimony when, after careful study and reflection, I found it to be unpersuasive and contrary to the weight of evidence. [32]

*B. Expert Testimony Concerning The Meaning Of
Vanguard Heat Detector Promotional Material*

69. Joel Cohen, Ph. D., is a professor of marketing and director of the Center for Consumer Research at the University of Florida. He specializes in consumer behavior and impression formation and attitudes (Cohen 270-71). The Center for Consumer Research studies consumer behavior and facilitates research on consumer behavior. It is formally related to both the marketing department and the consumer psychology program at the University (Cohen 272-73). In addition to his work with the Center for Consumer Research, Dr. Cohen teaches undergraduate and graduate courses in consumer behavior, cognitive psychology and consumer information processing (Cohen 274). He has taught in the marketing department at the University of Illinois, developing a consumer behavior curriculum and has been the director of the social and behavioral science division of National Analysts, a major marketing and social science research organization (Cohen 276). In this last position, Dr. Cohen was named vice president of the parent firm, Booz, Allen & Hamilton. In that position, he conducted surveys and studies concerning consumers' interpretation and evaluation of advertising claims for various products, including medications and automobiles (Cohen 277). His area of specialization, based upon this education, training and experience, is "consumer information processing," the process by which consumers interpret and evaluate the advertising or promotional materials presented to them, and the effect that those materials have upon the consumers (Cohen 278-

79). Dr. Cohen has testified previously as an expert in consumer information processing before the Federal Trade Commission, the Senate of the United States, and various state government agencies. He has also written extensively in the area of consumer behavior and consumer information processing, as shown by the articles and studies identified in his *curriculum vitae*, CX 59 (Cohen 279-81).

70. Based upon his background, training, education, experience and study of respondent's sales methods and materials, Dr. Joel Cohen is well-qualified as an expert in the field of consumer behavior and consumer information processing, and he is fully competent to assist the Commission by providing his expert testimony on the meaning and effect of respondent's advertising and promotional representations concerning Vanguard heat detectors. Dr. Cohen's opinions are based upon his application of his expertise to a review and analysis of CX 61 - CX 81 and CX 129 - CX 133 (Cohen 271).

71. Dr. Cohen discussed in detail the Vanguard heat detector promotional material he reviewed and testified that the material he reviewed and discussed contains the representations [33] alleged in Paragraph Five of the amended complaint (*see* Cohen 302-09, 381-83, 390-428, 442-43).

72. It is also Dr. Cohen's view that the promotional materials he reviewed "all contribute to the very clear net impression that is alleged in Paragraphs 5(1) and 5(2)" of the amended complaint and further that to conduct a study designed to determine whether the promotional materials he reviewed do in fact convey the alleged claims to consumers "would be a waste of taxpayer's money" because "the record is very clear" and such a study is not needed (Cohen 430-31).

73. On cross-examination, Dr. Cohen also agreed that:

a. Respondent did not represent that heat detectors will provide the necessary warning to all occupants of a house no matter where the detectors are installed (Cohen 446) or where the occupants are located (Cohen 447) or where the fire occurs (Cohen 452) or what type of fire occurs (Cohen 452) or under all circumstances (Cohen 452).

b. Respondent did not represent that installation of a single heat detector anywhere in a house will ensure that all occupants of the house will be given the necessary warning to escape safely (Cohen 443-47).

c. Respondent did not represent that in the event of most fires heat detectors alone will provide the necessary warning to occupants to allow them to escape safely under all circumstances nor is it likely that a consumer would derive such an impression from the sales material (Cohen 457-58).

d. Respondent did not represent that its heat detectors will perform equally well no matter where they are placed (Cohen 446). [34]

C. *Vanguard Heat Detector Promotional Material Containing Representations Alleged In The Amended Complaint*

74. The representation alleged in Paragraph 5(1) of the amended complaint that "in the event of most fires, respondent's heat detectors provide the necessary warning to occupants to allow them to escape safely" is made directly or by implication in the following promotional material:

a. The old and new slide presentations (CX's 129-33; Tr. 1586-1604), discussed in F. 36-40, *supra*;

b. CX 61, *Disneyland Hotel*, a promotional brochure discussed in F. 41-49, *supra*;

c. CX 63, *News Bulletin*, a promotional piece discussed in F. 50, *supra*;

d. CX 67 and CX 80, *The Purpose of My Visit*, promotional pieces discussed in F. 52-53, *supra*;

e. CX 68, *Are Smoke Detectors Really Enough Protection From Fire?* a promotional piece discussed in F. 54-55, *supra*;

f. CX 69, *If You're Serious About Fire Protection*, a promotional piece discussed in F. 56, *supra*;

g. CX 70, *Highlights of Over One Thousand Vanguard Activations in Real Fire Situations*, a promotional piece discussed in F. 57, *supra*;

h. CX 71, a promotional booklet, discussed in F. 58-60, *supra*;

i. The Cardboard House (CX 81) demonstration, discussed in F. 62, *supra*; and

j. The warranty book (CX 66), discussed in F. 63, *supra*.

75. In CX 61 (*Disneyland Hotel*) and the Cardboard House demonstration (CX 80), the single message that is conveyed to the consumer is that Vanguard heat detectors are dependable fire protection devices and will give early fire warning for a safe escape in most residential fires. [35]

76. In the other promotional and the so-called warranty book (CX 66) referred to in F. 63, *supra*, the claim that Vanguard heat detectors are dependable fire warning devices that have saved many lives is made, along with a companion claim that the Vanguard combination system provides increased fire protection. The degree of emphasis placed upon the effectiveness of Vanguard heat detectors vis-a-vis smoke detectors varies from one promotional piece to the next. However, there can be no disputing that every one of them clearly conveys the effectiveness claim for Vanguard heat detectors alleged in Paragraph 5(1) of the amended complaint.

