June 11, 1984 James T. Williams, Esquire Neuman, Williams, Anderson & Olson 77 West Washington Street Chicago, Illinois 60602 Dear Jim: Re: Magnavox v. Activision With reference to your letter of June 1, 1984 and Charles Quarton's letter of June 6, 1984, enclosed herewith please find Plaintiffs' Second Supplemental Response To Defendant's Interrogatories which I have executed on behalf of Sanders. Please note on Page One in the document title, that the word "To" is repeated twice. Would you kindly correct the document title. Thank you for your attention to this matter. Very truly yours, SANDERS ASSOCIATES / INC. Louis Etlinger Corporate Director Patents and Licensing LE: amc naived Kelend Express
(6/4/84
See Enclosure xxxx 2640 03061-0868 C. S. 868

PILLSBURY, MADISON & SUTRO Robert P. Taylor 225 Bush Street Mailing Address: 3 P.O. Box 7880 San Francisco, CA 94120 Telephone: (415) 983-1000 5 NEUMAN, WILLIAMS, ANDERSON & OLSON Theodore W. Anderson 6 James T. Williams 77 West Washington Street Chicago, IL 60602 Telephone: (312) 346-1200 8 Atto 9 The ! Sand 10 11 ourt For The alifornia 12 13 THE MAGNA and SANDE 14 a corpora No. C 82 5270 JPV 15 PLAINTIFFS' SECOND SUPPLEMENTAL RESPONSE TO 16 v. TO DEFENDANT'S INTERROGATORIES 17 ACTIVISION, INC., a corporation, 18 Defendant. 19 20 Plaintiffs herewith supplement their responses to 21 defendant's interrogatories 33, 35, 37, 77, 78, 104, 109-112, 128, 22 129, 138-152 and 154. 23 24 INTERROGATORY NO. 33 25 If the answer to INTERROGATORY NO. 32 is other than an 26 unqualified negative, identify each such study, including: 27 28 PLAINTIFFS' SECOND

SUPPLEMENTAL RESPONSE TO DEFENDANT'S INTERROGATORIES

- - 7. Telephone conference notes; May 11, 1977; note of James T. Williams of telephone conference with Thomas F. Rooney of Bacon and Thomas; re U. S. patent 3,135,815; attorney-client privilege and attorney work product.
 - 8. Meeting agenda; May 12, 1977; agenda prepared for meeting of plaintiffs' counsel including Thomas A. Briody, William J. Streeter, Louis Etlinger, Richard I. Seligman, Theodore W. Anderson and D. Dennis Allegretti; re Spiegel patent reference; attorney-client privilege and attorney work product.
 - 9. Handwritten working notes; undated but believed to have been prepared by James T. Williams between April 1, 1977 and June 1, 1977; re U.S. patent 3,135,815; attorney work product.
 - 10. Marked-up copies of U.S. patent 3,728,480; undated but believed to have been prepared by James T. Williams between April 1, 1977 and June 1, 1977; attorney work product.
 - 11. Marked-up copies of drawing figures from Spiegel
 German patent; undated but believed to have been prepared by James
 T. Williams between April 1, 1977 and June 1, 1977; attorney work
 product.
 - 12. Draft patent claims; undated but believed to have been prepared by James T. Williams between April 1, 1977 and June 1, 1977; attorney-client privilege and attorney work product.
 - 13. Draft patent claims; undated but believed to have been prepared by James T. Williams between April 1, 1977 and June 1, 1977; attorney-client privilege and attorney work product.

-4-

- 14. Draft patent claims; undated but believed to have been prepared by Richard I. Seligman between April 1, 1977 and June 1, 1977; attorney work product and attorney-client privilege.
- 15. Multiple sets of draft patent claims; undated but believed to have been prepared and/or revised by Richard I. Seligman and James T. Williams between April 1, 1977 and June 27, 1977; attorney work product and attorney-client privilege.
- 16. Meeting notes; May 18, 1977; notes of Richard I.

 Seligman of meeting also attended by Louis Etlinger and Robert

 Cesari; re proposed reissue application; attorney work product and attorney-client privilege.
- 17. Handwritten work notes; May 17, 1977; prepared by Richard I. Seligman; re proposed reissue application; attorney work product and attorney-client privilege.
- 18. Four pages of handwritten work notes; undated but believed to have been prepared by Richard I. Seligman between April 1, 1977 and June 27, 1977; re proposed reissue application; attorney work product and attorney-client privilege.
- 19. Memorandum; May 2, 1977; Richard I. Seligman to Ralph H. Baer; re Spiegel U.S. and German patents; attorney-client communciations.
- 20. Other telephone conferences between plaintiffs' counsel relating to the study may have occurred.

INTERROGATORY NO. 35

If the answer to INTERROGATORY NO. 34 is other than an unqualified negative, for each claim thought to be invalid or unenforceable:

- A. Identify the claim and the patent in which the claim is found;
- B. Set forth in detail the reason why the claim is or was thought to be invalid or unenforceable;
- C. Set forth the circumstances under which the claim was determined to be invalid or unenforceable;
- D. Describe any action taken with respect to the claim once it was determined to be invalid or unenforceable;
- E. Identify all persons having knowledge of the subject matter of parts A through D of this interrogatory;
- F. Identify all communications relating to the subject matter of parts A through E of this interrogatory; and
- G. Identify all documents which refer or relate in any way to the subject matter of parts A through F of this interrogatory.

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trial or settlement. Plaintiffs' counsel are the individuals associated with plaintiffs having the greatest knowledge of the subject matter of this interrogatory.

An additional assertion of invalidity of claims of U.S. patents 3,728,480 and Re. 28,507 was made by RCA Corporation on the basis of a computer demonstration of a pool game during negotiations between RCA Corporation and Magnavox. Magnavox continued to pursue its infringement charge against RCA Corporation and eventually settled the matter. The computer pool demonstration was disclosed by Magnavox to the defendants in the action for infringement of U.S. patent Re. 28,507 then pending in the Northern District of Illinois, No. 74 C 1030. Thomas A. Briody and William J. Streeter are the individuals associated with either plaintiff having the greatest knowledge of the assertion by RCA Corporation.

INTERROGATORY NO. 77

Identify all documents in the possession, custody or control of Magnavox and/or Sanders which refer or relate in any manner to the references and prior art identified in INTERROGATORY NO. 74.

RESPONSE:

Interrogatory 77 has been limited by defendants to documents reflecting searches, opinions, discussions or evaluations of the references referred to as prior art.

Plaintiffs are presently unaware of any such documents other than those identified in plaintiffs response to interrogatory 33 and the decisions in The Magnavox Co. v. Chicago Dynamic Industries, 201 U.S.P.Q. 25 (N.D.III. 1977) and The Magnavox Co. v. Mattel, Inc., 216 U.S.P.Q. 28 (N.D.III. 1982).

INTERROGATORY NO. 78

Identify all persons employed by either Sanders or Magnavox who have knowledge of any of the references or other prior art identified in Interrogatory 74.

RESPONSE:

Interrogatory 78 has been limited by defendant to knowledge of the inventors of U.S. patents 3,728,480, 3,659,284, and Re. 28,507, the attorneys or agents who prepared or prosecuted the applications for those patents, and other individuals substantially involved in the preparation or prosecution of the application for those patents who were associated with the inventor, the assignee, or with anyone to whom there was an obligation to assign the application. Louis Etlinger, Richard I. Seligman, Ralph H. Baer, William T. Rusch, Theodore W. Anderson and James T. Williams, all have some knowledge of one or more of the references or other purported prior art identified in interrogatory 74.

No specific disclosure of Mr. Williams' personal recollection was made. The "Spacewar" demonstration was disclosed to the Patent and Trademark Office by Sanders Associates in connection with the application for reissue of U.S. patents 3,728,480 and 3,829,095.

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INTERROGATORY NO. 112

If the answer to INTERROGATORY NO. 111 is other than an unqualified negative, identify each such disclosure, including:

- A. Identification of the person(s) making the disclosure;
- B. Identification of the person(s) in the Patent Office to whom the disclosure was made;
- C. The relationship, if any, to Magnavox and/or Sanders of each person identified in response to part B of this interrogatory;
- D. The date of the disclosure;
- E. The manner in which the disclosure was made;
- F. Identify all persons having knowledge of the subject matter of parts A through F of this interrogatory; and
- G. Identify all documents which refer or relate in any way to the subject matter of parts A through G of this interrogatory.

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No response required.

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INTERROGATORY NO. 128

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Patent Re. 28,507, identify the elements which plaintiffs contend correspond to the following elements of the claim: A. A baseball game; Apparatus for playing a baseball type game; В. A hit spot; C. Means for displaying a hit spot; D. A hitting spot; E. F. Means for displaying a hitting spot; An adjustment in the vertical position of said G.

A serving of the hit spot;

hitting spot;

hitting spot;

H.

-15-

Means for adjusting the vertical position of said

For each combination of the games identified in response

to Interrogatory No. 38 of Defendant's First Set of Interroga-

and "Ice Hockey") and the consoles identified in response to

tories to Plaintiffs (namely, "Fishing Derby", "Boxing", "Tennis"

Interrogatory No. 50 of Defendant's First Set Of Interrogatories

To Plaintiffs (namely, the Atari VCS Model 2600, the Sears Tele-

Game Video Arcade, and the combination of the Colecovision game

console and the Expansion Module 1) which plaintiffs contend

constitutes an infringement of Claim 44 of the United States

1 J. Means for serving said hit spot; 2 K. A variation in the vertical position of the hit 3 spot; 4 L. Means for varying the vertical position of said hit 5 spot; 6 M. Coincidence between said hit and said hitting spot; 7 A reversal of directions by the hit spot; and N. 8 0. Means for denoting coincidence between said hit and 9 said hitting spots whereby said hit spot will 10 reverse directions. 11 12 RESPONSE: 13 Based upon the information presently available to 14 plaintiffs concerning the television game cartridges manufactured, 15 used, and/or sold by Activision, and the television game consoles 16 with which those cartridges are used, and as presently advised, plaintiffs do not contend that any of the combinations referred to 17 in this interrogatory constitutes an infringement of claim 44 of 18 U.S. patent Re. 28,507 19 20 INTERROGATORY NO. 129 21 For each combination of the games identified in response 22 to Interrogatory No. 38 of Defendant's First Set of Interroga-23 tories to Plaintiffs (namely, "Fishing Derby", "Boxing", "Tennis" 24

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Interrogatory No. 50 of Defendant's First Set Of Interrogatories

and "Ice Hockey") and the consoles identified in response to

- Q. Means for ascertaining coincidence between either of said hitting spots and said hit spot;
- R. A distinct motion imparted to said hit spot upon coincidence; and
- S. Means for imparting a distinct motion to said hit spot upon coincidence.

Based upon the information presently available to plaintiffs concerning the television game cartridges manufactured, used, and/or sold by Activision, and the television game consoles with which those cartridges are used, and as presently advised, plaintiffs do not contend that any of the combinations referred to in this interrogatory constitutes an infringement of claim 45 of U.S. patent Re. 28,507

INTERROGATORY NO. 138

Identify all portions of the subject matter described in U.S. Patent 3,728,480 which Magnavox and Sanders contend are not prior art with regard to United States Patent Re. 28,507.

RESPONSE:

This interrogatory has been limited by defendant to the portions of U.S. Patent 3,728,480 enumerated in this response.

Circuits as described at column 4, lines 16-21; column 6, lines 7-22 and 45-58; column 8, lines 33-54; column 9, lines 39 - column

1 10, line 15; column 12, lines 23-26, 44-48, and 57-60; Claims 13-23; Claims 26-30, and Claim 41 of U.S. Patent 3,728,480 were built 3 and used with a color television receiver by the inventor thereof 4 prior to the commencement of reasonable diligence toward reduction 5 to practice of the claimed subject matter of U.S. Patent Re. 6 28,507. 7 8 INTERROGATORY NO. 139 9 For each portion of the subject matter of U.S. Patent 10 3,728,480 identified in response to Interrogatory No. 138: 11 Set forth in detail the basis of the contention 12 that the portion of the subject matter is not prior art; 13 Identify all persons having knowledge of the 14 respective dates of invention of that portion of the subject 15 matter and the subject matter of United States Letters Patent Re. 28,507; and 16 17 Identify all documents which refer or relate in any way to the subject matter of this interrogatory, including 18 19 all documents which support the contention that the portion of the subject matter is not prior art with regard to United 20 States Letters Patent Re. 28,507. 21 22 RESPONSE: 23 No response required in view of the response to 24

interrogatory 138.

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INTERROGATORY NO. 140

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With regard to the invention of means for denoting coincidence when a dot generated by one dot generator is located in the same position on a television screen as a dot generated by another dot generator, as claimed in Claim 13 of U.S. Patent 3,728,480:

- A. What is the earliest date for each of the follow-ing:
 - (1) Conception;
 - (2) Actual reduction to practice; and
 - (3) Diligence toward reduction to practice;
- B. Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;
- C. Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such person;
- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;
- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;

- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for denoting coincidence between a dot generated by one dot

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generator is located in the same position on a television screen as a dot generated by another dot generator are a page of handwritten notes dated May 23, 1967 (Sanders Deposition Exhibit 23, page 23) and prepared by William Harrison under the direction and at the suggestion of Ralph H. Baer, and laboratory notebook entries dated May 24, 1967 (Sanders Deposition Exhibit 16, pages 44 and 45) made by William Harrison under the direction and at the suggestion of Ralph H. Baer. Additional drawings showing such circuitry and references to such circuitry are dated June 14, 1967 (Sanders Deposition Exhibit 23, page 81) July 18, 1967, (Sanders Deposition Exhibit 16, page 78) September 12, 1967 (Sanders Deposition Exhibit 16, page 89, Sanders Deposition Exhibit 9, pages 89 and 90), each of which was prepared by William Harrison under the direction and at the suggestion of Ralph H. Baer. suggestion for such circuitry was made by Ralph H. Baer in approximately May 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 28) was first constructed during the period May - June 1967.

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INTERROGATORY NO. 141

With regard to the invention of means for ascertaining coincidence between a hitting symbol and a hit symbol as claimed in Claim 25 of United States Letters Patent Re. 28,507:

- A. What is the earliest date for each of the following:
 - (1) Conception;

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- (2) Actual reduction to practice; and
- (3) Diligence toward reduction to practice;
- B. Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;
- C. Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such person;
- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;
- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;

- (3) The person(s) who constructed each;
- (4) All persons having access to each prior to May 27, 1969; and
- (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for ascertaining coincidence between a hitting symbol and a hit symbol are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory notebook entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the

-24-

suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. 3 Apparatus including such circuitry (Sanders Deposition Exhibit 30) 4 was first constructed during the period October - December 1967: 5 other apparatus, including such circuitry was constructed 6 subsequently. 7 INTERROGATORY NO. 142 8 With regard to the invention of means for imparting a distinct motion to the hit symbol upon coincidence, as claimed in 10 Claim 25 of United States Letters Patent Re. 28,507: 11 What is the earliest date for each of the 12 following: 13 (1) Conception; 14 (2) Actual reduction to practice; and 15 (3) Diligence toward reduction to practice; Describe in detail the events which constitute the 16 В. conception, reduction to practice and diligence on 17 which the dates set forth in response to Parts 18 A(1)-A(3) of this interrogatory are based; 19 Identify all persons who participated in each of C. 20 the events described in response to Part B of this 21 interrogatory, including the role of each such 22 23 person; 2.4 25 26 27 -25-28

- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;
- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and

I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

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The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for imparting a distinct motion to the hit symbol upon coincidence are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

INTERROGATORY NO. 143

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SUPPLEMENTAL RESPONSE TO DEFENDANT'S INTERROGATORIES

- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for denoting coincidence between hit and hitting spots are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition

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Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

INTERROGATORY NO. 144

With regard to the invention of the concept of the hit

With regard to the invention of the concept of the hit spot reversing direction, as claimed in Claim 44 of United States Letters Patent Re. 28,507:

- A. What is the earliest date for each of the following:
 - (1) Conception;
 - (2) Actual reduction to practice; and
 - (3) Diligence toward reduction to practice;
- B. Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;

H.	Identify all persons not otherwise identified in
	response to this interrogatory who have knowledge
	of the subject matter of any of Parts A through G
	of this interrogatory, and indicate the subject
	matter of which each such person has knowledge; and

 Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for reversing the direction of a hit spot are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such

- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

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The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for ascertaining coincidence between either of two hitting spots and a hit spot are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

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INTERROGATORY NO. 146

With regard to the invention of means for imparting a distinct motion to a hit spot upon coincidence with one of two hitting spots, as claimed in Claim 45 of United States Letters Patent Re. 28,507:

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- (2) Actual reduction to practice; and
- (3) Diligence toward reduction to practice;
- Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts
- Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such
- Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the
- Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and
- Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each

- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for imparting a distinct motion to a hit spot upon coincidence with one of two hitting spots are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25,

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1 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) 2 made by William T. Rusch, and pages of handwritten notes and 3 drawings dated in October, 1967 through January, 1968 and prepared 4 by William Harrison at the suggestion of William T. Rusch. 5 Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were 6 prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. 8 9 Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed 10 11 during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently. 12 13 INTERROGATORY NO. 147 With regard to the invention of means for ascertaining 14 coincidence between a hitting symbol and a hit symbol, as claimed 15 in Claim 51 of United States Letters Patent Re. 28,507: 16 What is the earliest date for each of the 17 A. following: 18 (1) Conception; 19 (2) Actual reduction to practice; and 20

- (3) Diligence toward reduction to practice;
- Describe in detail the events which constitute the В. conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;

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- C. Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such person;
- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;
- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.

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- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for ascertaining coincidence between a hitting symbol and a hit symbol are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30)

-40-

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- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

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The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for imparting a distinct motion to the hit symbol upon coincidence with a hitting symbol are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

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INTERROGATORY NO. 149

With regard to the invention of means for determining a first coincidence between first and second symbols, as claimed in Claim 60 of United States Letters Patent Re. 28,507:

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Α.	What	is	the	earliest	date	for	each	of	the
	follo	owi							

- (2) Actual reduction to practice; and
- (3) Diligence toward reduction to practice;
- Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;
- Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such
- Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the
- Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and
- Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;

- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for determining a first coincidence between first and second symbols are a page of handwritten notes dated May 23, 1967 (Sanders Deposition Exhibit 23, page 23) and prepared by William Harrison under the direction and at the suggestion of Ralph H.

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Baer, and laboratory notebook entries dated May 24, 1967 (Sanders Deposition Exhibit 16, pages 44 and 45) made by William Harrison under the direction and at the suggestion of Ralph H. Baer. Additional drawings showing such circuitry and references to such circuitry are dated June 14, 1967 (Sanders Deposition Exhibit 23, page 81) July 18, 1967, (Sanders Deposition Exhibit 16, page 78) September 12, 1967 (Sanders Deposition Exhibit 16, page 89, Sanders Deposition Exhibit 9, pages 89 and 90), each of which was 8 prepared by William Harrison under the direction and at the 10 suggestion of Ralph H. Baer. The suggestion for such circuitry 11 was made by Ralph H. Baer in approximately May 1967. Apparatus 12 including such circuitry (Sanders Deposition Exhibit 28) was first 13 constructed during the period May - June 1967. INTERROGATORY NO. 150

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With regard to the invention of means for imparting a distinct motion to the second symbol, as claimed in Claim 60 of United States Letters Patent Re. 28,507:

- What is the earliest date for each of the A. following:
 - (1) Conception;
 - (2) Actual reduction to practice; and
 - Diligence toward reduction to practice;

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B. Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;

- C. Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such person;
- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;
- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;

- (4) All persons having access to each prior to May 27, 1969; and
- (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for imparting a distinct motion to the second symbol are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T.

-48-

T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

INTERROGATORY NO. 151

With regard to the invention for determining a second coincidence between a third symbol and the second symbol, as claimed in Claim 61 of United States Letters Patent Re. 28,507:

- A. What is the earliest date for each of the following:
 - (1) Conception;
 - (2) Actual reduction to practice; and
 - (3) Diligence toward reduction to practice;
- B. Describe in detail the events which constitute the conception, reduction to practice and diligence on which the dates set forth in response to Parts A(1)-A(3) of this interrogatory are based;
- C. Identify all persons who participated in each of the events described in response to Part B of this interrogatory, including the role of each such person;
- D. Identify the first person(s) to suggest the invention, state the date the invention was first suggested, and identify the person(s) to whom the invention was suggested;

- E. Identify all persons to whom the invention was disclosed prior to May 27, 1969 and the date and place of each such disclosure;
- F. Identify all persons who had knowledge of the invention prior to May 27, 1969 and the date each such person learned of the invention;
- G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:
 - (1) A concise description of each;
 - (2) The date(s) each was made;
 - (3) The person(s) who constructed each;
 - (4) All persons having access to each prior to May 27, 1969; and
 - (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

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The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for determining a second coincidence between a third symbol and the second symbol are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967 through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch. Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry (Sanders Deposition Exhibit 30) was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

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INTERROGATORY NO. 152

With regard to the invention of means for impartng a distinct motion to the second symbol in response to the second coincidence, as claimed in Claim 61 of United States Letters Patent Re. 28,507:

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G. Identify all prototypes, laboratory models, breadboard circuits and other physical embodiments of the invention made prior to May 27, 1969, including the following:

- (1) A concise description of each;
- (2) The date(s) each was made;
- (3) The person(s) who constructed each;
- (4) All persons having access to each prior to May 27, 1969; and
- (5) The present location and condition of each.
- H. Identify all persons not otherwise identified in response to this interrogatory who have knowledge of the subject matter of any of Parts A through G of this interrogatory, and indicate the subject matter of which each such person has knowledge; and
- I. Identify all documents which refer or relate in any way to the subject matter of this interrogatory.

RESPONSE:

The earliest written record relating to the work done on television games by employees of plaintiff Sanders Associates of which plaintiffs are presently aware that shows or refers to any means for imparting a distinct motion to the second symbol in response to the second coincidence are a memorandum dated May 10, 1967 to R. Baer from W. Rusch (Sanders Deposition Exhibit 9, pages 44-50), laboratory methods entries dated September 25, 1967

through January, 1968 (Sanders Deposition Exhibits 17-19) made by William T. Rusch, and pages of handwritten notes and drawings dated in October, 1967 through January, 1968 and prepared by William Harrison at the suggestion of William T. Rusch.

Additional drawings showing such circuitry are dated December 22, 1967 (Sanders Deposition Exhibit 23, pages 160-163) and were prepared by William Harrison at the suggestion of William T. Rusch. The suggestion for such circuitry was made by William T. Rusch in approximately May, 1967. Apparatus including such circuitry was first constructed during the period October - December 1967; other apparatus, including such circuitry was constructed subsequently.

INTERROGATORY NO. 154

Identify each of the certain games known as "Spacewar" which plaintiffs have acknowledged at Massachusetts Institute of Technology in the early 1960's in response to Part (c) of Interrogatory No. 75 of Defendant's First Set of Interrogatories to Plaintiffs, including the following:

- (a) A description of the game;
- (b) The date(s) when each such game was played;
- (c) State when and under what circumstances Magnavox and/or Sanders first became aware of each such game;
- (d) Identify all personnel of Magnavox and/or Sanders having knowledge of each such game and the date(s) each such person acquired such knowledge; and

(e) Identify all documents in the possession, custody or control of Magnavox and/or Sanders which refer or relate in any way to each such game.

RESPONSE:

Paragraphs (c) - (e) of interrogatory 154 have been limited by defendant to knowledge of the inventors of U.S. Patent 3,728,480, 3,659,284, and Re. 28,507, the attorneys or agents who prepared or prosecuted the applications for those patents, and other individuals substantially involved in the preparation or prosecution of the applications for those patents who were associated with the inventor, the assignee, or with anyone to whom there was an obligation to assign the application.

- (c) The earliest that any of the persons referred to in this interrogatory as limited by defendant obtained knowledge of the different demonstration known as "Spacewar" is presently believed to be during the taking of the deposition referred to in plaintiffs' prior response to interrogatory 154. Plaintiffs or its counsel did receive some information relating to the demonstration known as "Spacewar" prior to the commencement of those depositions. That information was received as follows:
- 1. A book entitled "II Cybernetics Frontiers" was purchased by or for plaintiffs' counsel Theodore W. Anderson and James T. Williams on approximately July 15, 1975. Louis Etlinger and Richard I. Seligman saw at least portions of the book at a later date.

2. Interrogatory responses of Midway Mfg. Co. in Civil Action No. 74 C 1030 in the Northern District of Illinois received by plaintiffs' counsel Theodore W. Anderson and James T. Williams on approximately July 23, 1975.

- 3. Copies of production documents of Midway Mfg. Co. in said Civil Action No. 74 C 1030 first produced for inspection by plaintiffs' counsel James T. Williams on approximately August 1, 1975.
- 4. Oral and telephone conversations of Messrs. Louis Etlinger, James T. Williams, and John Sauter on approximately October 9, 1975.
- 6. Conference of Messrs. Louis Etlinger, James T. Williams, and personnel of Digital Equipment Corporation on approximately October 17, 1975 and document copies received as a result of that conference.
- (d) See the response to paragraph (c) of this interrogatory.

-56-

1	(e) Paragraph (e) of this interrogatory has been
2	limited by defendant to documents reflecting searches, opinions,
3	discussions or evaluations of the games known as "Spacewar" as
4	prior art. Plaintiffs are presently aware of no such documents.
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6	1 1 10- 20- 110
7	June 6, 1984, 1984 The Magnayox Company
8	Subscribed and sworn to before me
9	this 6th day of June, 1984, in Knot County, Jennessee.
10	Basicasa Sulli
11	Notary Public
12	My Commission Expires: June 23,1986
13	UNE 11,1984 , 1984 Downs Thus
14	Sanders Associates, Inc.
15	Subscribed and sworn to before me this Ith day of June, , 1984,
16	in Nashua, New Hampshire.
17	Notary Public
18	My Commission Expires: Maul 3, 1987
19	The foregoing contentions are asserted or stated on
20	behalf of plaintiffs by:
21	
22	Theodore W. Anderson James T. Williams
23	NEUMAN, WILLIAMS, ANDERSON & OLSON Attorneys for The Magnavox Company
24	and Sanders Associates, Inc. 77 West Washington Street
25	Chicago, Illinois 60602 (312) 346-1200
26	
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