

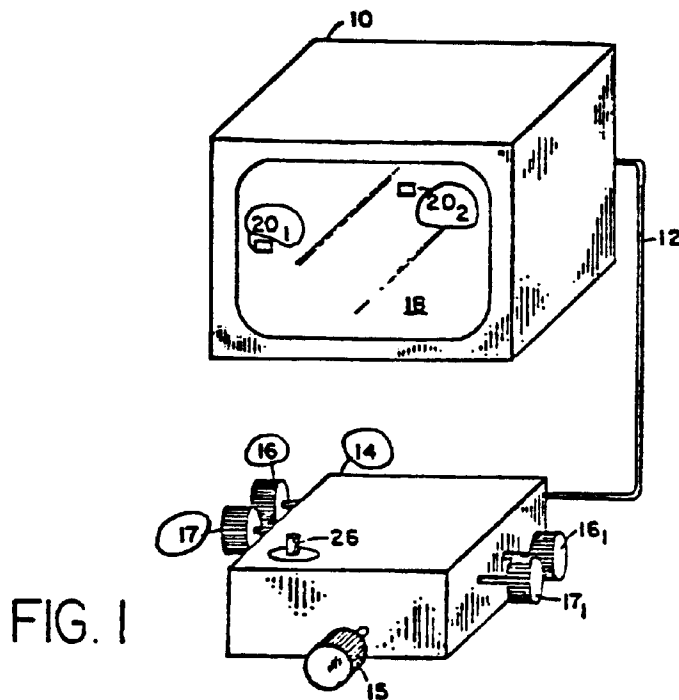
COMMISSIONER'S DECISION

REISSUE, OBVIOUSNESS: TELEVISION GAME

Reissue is sought for the original patent for TV games. A pertinent reference (Spiegel) came to light during world wide licence negotiations. Amended claims emphasizing the detecting and coincidence feature were submitted after the Hearing. Final Action: Amended claims accepted.

This decision deals with a request for review by the Commissioner of Patents of the Examiner's Final Action dated May 2, 1980 on Reissue Application 286,872 entitled: TELEVISION GAMING APPARATUS AND METHOD. The applicant, Sanders Associates, Inc., of the United States, was represented by Canadian Patent Agents, Mr. Alex Macklin Q.C., and M. Szczepaniak. Also present were Messrs Ralph H. Baer the inventor, Richard Seligman and James Williams United States Patent attorneys, and Peter L. Mothersole, who spoke as an expert witness.

The present invention is shown by fig. 1 reproduced below. It is concerned with the use of standard monochrome and color television receivers for generation, manipulation, and display of symbols or geometric figures 20₁ and 20₂ for the purpose of playing games by one or more participants. This is accomplished by an electronic control unit 14 which generates a modulated carrier frequency tuned to one of the channels of the receiver and is connected to the control unit via its antenna terminals. The control unit normally contains a number of control knobs 16, 17 which control the nature of the display permitting a variety of games to be played. In addition, patterned overlay masks may be removably attached to the television screen to assist in determining the nature of the game to be played. The invention also contemplates interaction with commercial TV, CATV, or closed circuit TV which would provide background and other pictorial information on the screen. In this latter case the control unit and antenna would be simultaneously connected to the receiver terminals. The broadest aspect of the invention is the conversion of a home television receiver from a passive to an active instrument via an electronic device which may be purchased as a widely distributed, low cost, consumer product.



In the Final Action the Examiner refused a large number of the claims as being anticipated or obvious in view of the following references:

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Canadian Patent

691,432 July 28, 1964 Cl. 350-48 Spiegel
(United States 3,135,815; June 2, 1964 corresponds)

Publications

(1) Electronic and Radio Engineering; Fourth Edition; McGraw-Hill -
1955 - page 659 - Terman

(2) Electronics and Nucleonics Dictionary; Third Edition; McGraw-Hill
- 1966 - Paged 357, 358 - Markus

Additional Reference of Interest

United States Patent

2,455,992 Dec. 14, 1948 Cl. 315-26 Goldsmith Jr. et al

...

The Examiner applied that art in the following terms:

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The Spiegel patent discloses a generating apparatus to be used in combination with a conventional television receiver to generate dots representing a target and a missile upon the screen (or cathode ray tube) of the television receiver. The examiner considers the Spiegel apparatus may be termed a television game.

Terman is cited to show that coincidence circuits are well known.

Markus is cited to show that light guns and pens are well known.

Goldsmith Jr. et al has been cited to show that a cathode-ray tube amusement device (or television game for amusement or diversion) was disclosed and known some thirty years ago. Admittedly, it did not use a standard or conventional television receiver but rather a specialized television receiver for playing games.

The rejection of claims 1 to 13, 24 to 31, 40, 41, 43 and 47 to 72 for failing to patentably define over the above cited Spiegel patent is maintained.

Claims 1 to 12, 24, 26 to 31, 40, 41 43 and 47 to 72 are obvious in view of Spiegel. That is, these claims may contain one or more features not found in Spiegel but these features are considered obvious to a person skilled in the electronics art and particularly the television art.

Claims 13 and 25 are anticipated by Spiegel.

New claims 73 to 87 are rejected as obvious in view of Spiegel.

The Examiner also objected to claims 1 to 3, 40, and 47 to 87 under Rule 25 respecting "selective coupling means" as not being fully supported by the disclosure. He made this objection (in part) as follows:

...

The examiner maintains that the output of the Spiegel apparatus would be connected, either directly or through some kind of switching device, to the antenna terminals of the conventional television receiver. Very little hindsight is required to make this assumption.

Furthermore, quite apart from the Spiegel patent, there is absolutely no inventive ingenuity involved in providing a selective coupling from either the control unit of the T.V. game or a standard T.V. signal source to the antenna terminals of the standard television receiver. Applicant even contemplates that this "selective coupling" feature includes within its scope the manual disconnection of the antenna lead from the television receiver antenna terminals and connection of the lead from the output of the control unit of the T.V. game to the television receiver antenna terminals for operation in the "T.V. game" mode and vice versa for operation in the standard television reception

mode. One cannot help but ask the question: "what could be more obvious?". It is hard to imagine that any purchaser of a television game would not know that for T.V. game operation he would have to connect the output lead of the T.V. game control unit to the antenna terminals of his television receiver and for normal television reception he would have to connect the lead from his T.V. antenna (or other source of standard T.V. signal) to the antenna terminals of his television receiver.

...

The applicant argues in his letter date May 17, 1979 that the simplest form of providing this selective coupling is to connect either from the control unit for playing of games or from an antenna for the viewing of broadcast programs. The examiner disagrees that this provides proper support for this "selectively coupling" limitation. Since all rejected claims are apparatus claims under consideration, applicant must disclose a particular piece of apparatus to provide this selective coupling, which he has not done.

The only piece of apparatus for this "selectively coupling" limitation that applicant has disclosed is the output lead of the control unit of his T.V. game. It must be remembered that the lead from a user's T.V. antenna is already owned by the user.

Merely mentioning in the disclosure that a person who has purchased one of these T.V. games can watch standard broadcast programs on his television receiver in addition to being able to play games on his television receiver does not provide proper and sufficient support for this "selectively coupling" limitation defined in the rejected claims.

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The Examiner also rejected new claims 73 to 87 under Rule 81 in the following terms:

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First, these claims are refused in that the petition for reissue fails to mention anything regarding these new claims 73 to 87 as required by Rule 81 of the Patent Rules. Rule 81 states "Every petition for the reissue of a patent shall set out fully in what respect the petitioner considers the patent defective or inoperative, how the error arose so far as can be ascertained and the time when the manner in which the petitioner obtained knowledge of any new fact stated in the revised disclosure or in the light of which any new claims of which allowance is asked have been framed." (Emphasis Added) Furthermore, the petition cannot be amended to overcome this objection.

...

In a response dated October 28, 1980, applicant submitted numerous amendments to the claims. These will be considered together with the other claims of record. Applicant also submitted a brief and argued (in part) as follows:

In essence, the Examiner's position is that the rejected claims in the application are either obvious or anticipated by Canadian patent 691,432 July 28, 1964 to Spiegel. Other references such as Electronic and Radio Engineering forth edition McGraw Hill 1955 and Electronics and Nucleonic Dictionary third edition McGraw Hill 1966 were applied as was a reference of interest U.S. 2,455,992 to Goldsmith Jr. but the principal reference in this case is the reference to Spiegel.

The invention in this case relates to a television game or in other words to an apparatus whereby active home entertainment capability may be added to a home television receiver which was previously employed only for passive viewing of programs. Prior to this invention, there was no such thing as a television game. What the present invention has taught to the world is the fact that signals can be generated in a person's home by connecting a box to his television receiver so that he can generate "dots" on the screen of his television receiver to play amusement games. The world did not know of any such thing (T.V. home games) and the invention disclosed in this application is the first disclosure of the use of a home television receiver to play amusement games thereon.

...

The claims therefore now particularly recite that the type of games to be played are amusement games and that the control unit provides active home entertainment capability. It is clear and we submit the Spiegel never contemplated nor would one skilled in the art reading the Spiegel patent obtain from it the concept of playing games at home on a television receiver for one's amusement. Spiegel's device as disclosed is merely a training device and a television receiver was used merely as a convenient display.

The Examiner has gone to great lengths in the final rejection to point out that the term "games" has a broad meaning and that which Spiegel discloses for training falls within many dictionary definitions of the word "games". In the second paragraph of page 8 of the action, the Examiner points out that one of the meanings for games is listed as "a competitive activity involving skill, chance, or endurance on the part of two or more persons who play according to a set of rules, usually for their own amusement or for that of spectators." The Examiner points out that the activity is usually for amusement but not necessarily restricted to amusement. In the next paragraph, the Examiner points out that the applicant cannot simply say that the word "game" has a particular restrictive meaning which is not supported by Spiegel.

In this regard, then applicant is by the present amendments to claim 1 in fact applying and claiming a restricted meaning to the word games, namely for active home entertainment and, in particular amusement games. This is

the meaning to which applicant intended that the use of the word games portray and by the present amendments to claim 1, applicant has more clearly defined and restricted his meaning of the word games and it is clear that Spiegel never contemplated amusement games of any kind or games to be played at home on a home television receiver.

With respect to the selective coupling limitation which the Examiner finds both not disclosed in the specification and obvious, we must respectfully disagree. The Examiner points out with respect to the selective coupling that the coupling, in fact, is provided by the user connecting and disconnecting leads from the television game control unit and disconnecting leads from the television game control unit and user's television antenna, and that it is improper to claim the user as part of the claimed apparatus; and, therefore, since the claims are apparatus claims, applicant must disclose a particular piece of apparatus to provide the selective coupling and this is not done.

With respect, we must disagree. The pieces of apparatus that provide the selective coupling are the output cable from the game control unit and that from an antenna. The fact that manual coupling has to be made by a user does not mean that the connecting cable is not proper apparatus. For example, if a switch were provided to provide the coupling from either the control unit or the antenna, the Examiner would say that this is proper selective coupling; however, we must point out that the switch itself would also have to be operated by the user. To switch the contact from the television antenna or the game control unit would require the intervention of a user. Such an intervention by the user would be proper. Applicant, thus, cannot understand why the fact of providing cables for doing the selective coupling is also not proper, despite the fact that user intervention is required to make the connections.

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Lastly, claim 87 speaks to detecting coincidence at least one time prior to the end of the playing period and as mentioned regarding coincidence earlier, Spiegel only detects coincidence at the end of the period when time runs out.

With respect to the refusal of claims 73 to 77 as not complying with Rule 81, it is submitted that the petition for reissue in this case was based on the discovery of the patent to Spiegel and that newly filed claims were drafted so as not to read on Spiegel. The petition did set out fully in what respect the petitioner considered the patent defective, how the error arose and the time in which the petitioner obtained knowledge. The claims filed with the petition for reissue were drafted to not read on Spiegel and the further claims 73 to 87 filed do not claim any new matter but rather are simply designed to reinforce the claims in the reissue application that is to say to provide claims that do not read on Spiegel. It is submitted these claims are clearly allowable in the reissue application. They do not attempt to claim anything beyond that set forth in the petition for reissue and clearly comply with Rule 81 of the Patent Rules.

...

The issue before the Board is whether or not the application is directed to patentable subject matter in view of the cited art. Claim 40 is representative, and reads:

40. Apparatus for permitting the playing of amusement games on the screen of a home television receiver previously employed only for passive viewing of programs, by at least one participant and generating "dots" upon the screen of the home television receiver to be manipulated by at least one participant, said apparatus comprising:

- a control unit for generating signals representing the "dots" to be displayed, said control unit further including means for generating horizontal and vertical synchronizing signals to synchronize a television raster scan of a receiver and means for manipulating the position of the "dots" on the screen to play games; and

- means for directly and selectively coupling the generated signals only to a single television receiver whereby in a first state said "dots" are displayed only upon the screen of the single receiver being viewed by the participant and in a second state such television receiver is capable of receiving broadcast television signals.

At the Hearing Mr. Macklin presented the Board Chairman with copies of affidavits sworn by the inventor Mr. Baer and by Mr. Mothersole. He also introduced copies of jurisprudence on which he relied during the Hearing.

In making his presentation Mr. Macklin stated that the invention had obtained great commercial success and it clearly was the genesis of the TV game home entertainment industry as it is known today. He also noted that, the owner of the basic patent, Sanders Associates earns royalties through an exclusive licensee which in turn has many agreements with other companies in the industry.

In discussing the prior art respecting the issue of obviousness, Mr. Macklin stated that the primary reference to Spiegel came late in the day since it did not arise as a result of normal prosecution in any country respecting the original patent. The reissue application with narrower claims was the result of this knowledge. He then went on to state that Spiegel only teaches two manually moveable dots and that other things such as coincidence, electronic ground lines, time sequence, and flight time of the missile, are mere suggestions to those persons skilled in the art of military training simulators. In short this reference is open to many interpretations. He then stated that Spiegel was

deficient as a prior art reference because the public must be given clear instructions to do something after the grant, and mere suggestions in a reference are not good enough.

The inventor Mr. Baer was then introduced and spoke with reference to his affidavit. During the period 1959 to 1972 he was a Division Manager with Sanders Associates and supervised electronic development work, primarily of a military nature. He then demonstrated his invention to the Board by means of a circa 1967 circuitry mounted on a board known as a breadboard unit connected to a standard television receiver. It contained switches to select a variety of games, some of which he demonstrated. He stated that simple chase games, ping pong games and handball games were developed. He also demonstrated coincidence of two dots, causing one to disappear, and said this was achieved by a diode logic circuit.

Mr. Baer then discussed the Spiegel patent with reference to his knowledge and the state of the electronics art at the time he conceived his invention in 1966. He stated that even if had known of Spiegel at that time, it would not have helped in making his invention. Considering his military electronics experience, he also stated that Spiegel does not provide enough information to build a missile training simulator since Figure 1 describes only standard textbook circuits, while the remainder of the description provides word pictures but not electronic circuitry. He then stated that in making his invention, his design philosophy was opposite to that of Spiegel since he took liberties with NTSC design specifications. In particular he realized that a TV set could operate with rudimentary input signals and also that blanking pulses were not necessary, which is in direct contrast with Spiegel.

Mr. P.L. Mothersole then spoke with reference to his affidavit. A review of paragraphs 4 and 5 of his affidavit shows that he is very well qualified in the television engineering field. Items 8 to 24 of his affidavit are concerned with Spiegel as a prior art reference and to the Sanders application as a description

of an invention. His statements respecting the inadequacy of Spiegel strongly supported the views expressed by the inventor. With respect to Sander's application, Mr. Mothersole believed that the Spiegel patent was clearly deficient as prior art.

At the conclusion of the Hearing, Mr. Macklin reiterated his written arguments that the claims were not open to rejection under Rules 25 and 81. With respect to the latter Rule, he stated that one should be at liberty to submit additional reissue claims subject only to restraints respecting scope of claims. He cited Farbwerke Hoechst (1966) S.C.R. at page 611, as support for his statement.

Considering first the rejection made under Rule 81, we are satisfied by Applicant's arguments that additional amended claims may be considered provided that they are related to the same scope of invention for which the Petition is filed. The rejection under Rule 81 of the Patent Rules should therefore be set aside.

Considering next the Spiegel patent and the other references, we are persuaded by the arguments advanced by the inventor, Mr. Baer, and Mr. Mothersole that the application contains matter which is not found in the cited art. We find that the means for detecting the coincidence as argued by the inventor and found in the disclosure, is a significant feature of the invention. We therefore contacted the Agent and explained our views. After due consideration, the Agent submitted a set of amended claims on December 10, 1982.

Amended claim 1 reads:

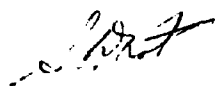
Apparatus for adding active home entertainment capability to a home television receiver by generating "dots" upon the screen of the television receiver to be manipulated by at least one participant, said apparatus comprising:

- a control unit for generating signals representing the "dots" to be displayed, said control unit further including means for generating horizontal and vertical synchronizing signals to synchronize a television raster scan of a receiver, means for

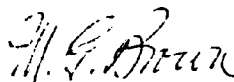
generating first signals representing the horizontal position of said "dots", means for generating second signals representing the vertical position of said "dots", means for manipulating the position of the "dots" on the screen to play games, and means for detecting coincidence of two of said "dots" on said screen; and means for coupling the generated signals representing the "dots" to be displayed and the synchronizing signals only to a single television receiver whereby the said "dots" are displayed only upon the screen of the single receiver being viewed by the participant.

We are satisfied that the amendments overcome the rejection based on the cited art, and no further discussion is necessary.

In summary, the arguments advanced at the Hearing and the amendments made on December 10, 1982, overcome the objections made in the Final Action. We recommend that the amendments be accepted.



S.D. Kot
Acting Chairman
Patent Appeal Board, Canada



M.G. Brown
Member

I have reviewed the prosecution of the application and considered the reasonings and findings of the Board. Accordingly, I direct that prosecution be resumed on the basis of the amended claims.



J.H.A. Gariépy
Commissioner of Patents

Dated at Hull, Quebec

this 1st. day of March, 1983