DECISION
of 26 January 2005

Case Number: T 0427/02 - 3.5.3
Application Number: 94309919.2
Publication Number: 0674405
IPC: H04H 9/00
Language of the proceedings: EN
Title of invention:
Method for surveying a radio or a television audience
Patentee:
Weinblatt, Lee S.
Opponent:
The Arbitron Company
Headword:
Audience surveying system/WEINBLATT
Relevant legal provisions:
EPC Art. 54, 111(1), 114(2), 123
Keyword:
"Novelty (yes)"
"Amendments - added subject-matter (no)"
"Extension of protection (no)"
"Late filed documents"
Decisions cited:
G 0009/91
Catchword:
Case Number: T 0427/02 - 3.5.3

DECISION
of the Technical Board of Appeal 3.5.3
of 26 January 2005

Appellant: Weinblatt, Lee S.
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Decision under appeal: Decision of the opposition division of the
European Patent Office posted 2 April 2002
revoking European patent No. 0674405 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: A. S. Clelland
Members: F. van der Voort
R. Moufang
Summary of Facts and Submissions

I. This appeal is against the decision of the opposition division revoking European patent No. 0 674 405.

II. The opposition was filed against the patent as a whole and on the grounds pursuant to Article 100(a) to (c) EPC. The opponent referred, inter alia, to the following documents:

D2: WO 94/11989 A1; and

D4: US 4 718 106 A.

III. The opposition division revoked the patent for the reason that the subject-matter of independent claims 1 and 10 of each of the four requests admitted to the proceedings lacked novelty vis-à-vis D2. This document was referred to in the decision as "prior art according to Article 54(3) EPC". The decision was silent on the allowability of the subject-matter of independent claim 14 of each of the four requests.

IV. The proprietor (appellant) lodged an appeal against the decision and requested that the decision be set aside and the patent be maintained in amended form.

V. In response, the opponent (respondent) requested that the appeal be dismissed. In support of his arguments, the respondent filed the following document:

D5: US 4 695 879 A.
VI. Both parties conditionally requested oral proceedings. In a communication accompanying the summons to attend oral proceedings, the board gave a preliminary opinion.

VII. In reply to the communication, the respondent additionally filed the following documents in support of his arguments:

D6: EP 0 598 682 A1;

D6': CA 2 136 054 A1;

D7: a document consisting of five pages allegedly forming extracts of a Seiko Datagraph User Manual;


D9: US 4 955 070 A;

D10: US 3 492 577 A; and

D11: US 2 573 279 A.

VIII. Oral proceedings were held on 26 January 2005 during which the appellant withdrew all existing requests and filed a single set of claims including two independent claims 1 and 9. The appellant further filed a drawing in support of his arguments and requested that the patent be maintained on the basis of the set of claims now on file. The respondent maintained his request that
the appeal be dismissed. At the end of the oral proceedings the board's decision was announced.

IX. Independent claim 1 as filed during the oral proceedings reads as follows:

"1. A system for surveying an audience to determine whether a person is tuned to a given signal source (1), such as a radio station or television channel, arranged to transmit a combined signal that combines both a programming signal and a survey signal characteristic of said signal source (1), the system including:

combining means (7) for combining the programming signal and the survey signal, said programming signal and said survey signal being in a frequency range to be audibly reproduced by a speaker (16) in a receiver apparatus (11,12,16) but the survey signal being such that it cannot be heard by a human being at an appreciable distance from the speaker,

first transmitting means (9) for transmitting the program signal and the survey signal as the combined signal, and

a receiver apparatus comprising:

receiving means (11,12,16) for receiving the combined signal and including a speaker (16) for reproducing therefrom the programming signal and the survey signal as acoustic signals, with the survey acoustic signal being such that it cannot be heard by a human being at an appreciable distance from the speaker (16);

conversion means (18,20,22) located in close proximity to said speaker, said conversion means being for detecting said acoustic survey signal produced by
said speaker (16) and converting said acoustic survey signal to a non-acoustic converted signal;
second transmitting means (24), located in close proximity to said speaker (16), for transmitting said converted survey signal as a non-acoustic radiated signal; and
signal detector means (28) movable with respect to said non-acoustic radiated signal transmitting means (24), and adapted to be worn, or accommodated in an article of clothing worn, by a person listening to the programming signal acoustically reproduced by said speaker, said second transmitting means (24) and said detector means (28) being such that said signal detector means (28) is effective to detect said non-acoustic radiated signal as being indicative of said signal source, at a distance from said non-acoustic radiated signal transmitting means (24) which is substantially greater than said appreciable distance in order to be suitable for normal listening to said programming signal."

Reasons for the Decision

1. Amendments - Article 123(2) EPC

1.1 Claim 1 corresponds to claim 1 as filed, to which, apart from the insertion of reference signs and amendments of editorial nature only, the following amendments have been made (hereinafter, unless stated otherwise, reference is made to the application as published; underlining added by the board):
(a) the expression "Apparatus" has been replaced by "A system", which in the context does not affect the scope of the claim;

(b) the transmission means have been redefined as "combining means" and "first transmitting means", cf. Fig. 1;

(c) it is specified that the speaker is for reproducing the programming signal, cf. col. 8, lines 16 to 19;

(d) it is specified that the survey signal cannot be heard by a human being at an appreciable distance from the speaker, cf. col. 8, lines 44 to 46;

(e) the conversion means and second transmitting means are said to be located in close proximity to the speaker, cf. col. 8, lines 23 to 26 and Fig. 1;

(f) it is specified that the second transmitting means is for transmitting the non-acoustic converted signal as a non-acoustic radiated signal, cf. col. 9, lines 8 to 10 ("non-acoustic") and col. 13, lines 16 to 21 ("radiating");

(g) the signal detector means is said to be movable with respect to the second transmitting means and adapted to be worn, or accommodated in an article of clothing worn, by a person listening to the programming signal, cf. col. 10, lines 15 to 20, 28 to 30 and 45 to 48; and
(h) the signal detector means is effective to detect the non-acoustic radiated signal at a distance from the second transmitting means which is substantially greater than the appreciable distance in order to be suitable for normal listening to said programming signal.

The term "appreciable distance", used in features d and h above, was used in claim 1 as granted but is prima facie unclear. In the light of the description and drawings of the patent, see col. 7, lines 20 to 22, it appears that approximately 30 centimetres ("one foot") is meant. A test person, who is wearing the portable signal detector unit 26 and is listening to the programming signal reproduced by the speaker in a room, would normally be at a distance from the speaker, and thus the transmitter 24, which is substantially greater than 30 centimetres (see col. 10, lines 49 to 52, col. 11, lines 2 to 5, col. 12, lines 21 to 27 and col. 3, lines 21 to 31).

1.2 The respondent argued that in claim 1 the signal detector means must be defined as including a code detector and a memory, since the use of reference sign "28" instead of "26" for the signal detector means permitted an interpretation according to which the signal detector means included only the code detector 28 of the portable signal detector unit 26 (see Fig. 1). Present claim 1 therefore violated Article 123(2) EPC.

The board does not accept this argument and considers that the term "signal detector means" is based on claim 1 as filed, see col. 14, lines 36 to 37, "means for detecting said ... signal". Further, the board
notes that reference signs merely serve the purpose of increasing the intelligibility of a claim and are not to be construed as limiting the claim (Rule 29(7) EPC).

1.3 The remaining objections under Article 123(2) EPC raised by the respondent either do not apply to present claim 1 since it does not include the wording in question or have been satisfactorily dealt with by amendment. The same applies to issues under Article 123(2) EPC mentioned in the board's communication.

1.4 The board is thus satisfied that claim 1 does not contain subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC).

2. Amendments - Article 123(3) EPC

2.1 Claim 1 is based on a combination of independent claim 1 and dependent claim 8 as granted, to which a number of features have been added, which further limit the protection conferred by claim 1 as granted. Further, the terms "receiver unit" and "said transmitted converted signal" have been replaced by "receiver apparatus" and "said non-acoustic radiated signal", respectively. These terms do not give rise to an extension of the protection conferred either; claim 1 as granted already made it clear that the term "receiver unit" must be interpreted broadly as synonymous with "receiver apparatus", since the receiver unit was defined as including a plurality of functionally independent, different means, namely a receiving means, a conversion means, a means for transmitting the converted signal, and a signal detector means. Further, the second term refers back to
the converted survey signal in "means ... for transmitting said converted survey signal as a non-acoustic radiated signal", a non-acoustic radiated signal being considered as a specific example of a transmitted signal.

2.2 The board is thus satisfied that claim 1 as granted has not been amended in such a way as to extend the protection conferred (Article 123(3) EPC).

3. Amendments - Article 84 EPC (clarity)

3.1 At the oral proceedings the respondent argued that claim 1 contravened Article 84 EPC in that the statement that the said signal detector means (28) was positioned such that it was "effective to detect said non-acoustic radiated signal ... at a distance from said non-acoustic radiated signal transmitting means (24) which is substantially greater than said appreciable distance in order to be suitable for normal listening to said programming signal" was of indeterminate meaning.

3.2 The board notes however that the distance in question is not only defined relative to the range of the acoustic survey signal, i.e. the "appreciable distance" (see point 1.1 h)), but is "suitable for normal listening to said programming signal". In this context, it is clear that, in use, the distance between a listener, when wearing the signal detector means, and the speaker will be substantially greater than the "appreciable distance". The board sees no necessity to have this distance further specified and therefore concludes that the definition is adequately clear and
the claim does not give rise to objection under Article 84 EPC.

4. **Admissibility of documents D5, D6, D6' and D7 to D11**

4.1 The respondent filed documents D5 and D9 in support of the allegation that the claimed subject-matter lacked an inventive step. Since this allegation will not be examined in the present appeal proceedings (see point 6 below), the question of admissibility does not arise in respect of these documents.

4.2 D6, D6', D7, D8, D10 and D11 were filed for the first time with the reply to the communication accompanying the summons to attend oral proceedings before the board. The respondent referred to D8, D10 and D11 only in connection with a novelty objection based on D2 and, more specifically, in support of an allegation that miniaturized FM receivers had at the priority date been known for some time and that the use of inaudible survey signals was long established in the field. D2 however does not refer to these documents. Lack of novelty was also argued on the basis of D4 in connection with D7. However, D7 is not dated and no evidence as to its publication date was provided by the respondent. D6, however, appeared *prima facie* highly relevant to the issue of the novelty of the subject-matter of claim 1 then on file; D6' on the other hand has a publication date of 18 May 1996 and therefore does not *prima facie* constitute prior art within the meaning of Article 54(2) EPC.
4.3 In view of the above, the board exercised its discretion under Article 114(2) EPC to admit D6 into the appeal proceedings, but not D6', D7, D8, D10 and D11.

5. Novelty - Article 54 EPC

5.1 The respondent argued that the subject-matter of claim 1 lacked novelty vis-à-vis D2, D4 or D6.

5.2 Document D2

5.2.1 D2 was published on 26 May 1994. It is not part of the state of the art pursuant to Article 54(2) EPC, since claim 1 is entitled to the claimed priority date of 21 March 1994 (cf. Article 89 EPC). However, D2, which corresponds to EP 0 688 487 A, constitutes state of the art pursuant to Article 54(3) and (4) EPC for all contracting states designated in the patent in suit, since the conditions pursuant to Article 158(2) EPC are fulfilled in respect of these contracting states.

5.2.2 D2 describes a system for monitoring audience exposure to broadcast program segments, such as commercials, from a signal source. The system includes a combining means 100 (see Fig. 1) for combining a program signal and a source identification signal, the combined signal being subsequently transmitted, implying transmitting means (page 9, line 32 to page 10, line 5, page 11, line 31 and page 13, lines 28 to 34). The system further includes a broadcast receiver 210 (Fig. 2A) with a speaker 220 for reproducing the program and source identification signals as acoustic signals, and a personal monitor, of which the embodiments according
to Figs. 2A and 2B were specifically referred to by the respondent.

5.2.3 According to the embodiment of Fig. 2A, the personal monitor 200 includes a combination 235A, including a microphone 230 and an amplifier 240, and a correlator 270. The personal monitor is adapted to be worn, or accommodated in an article of clothing worn, by a person listening to the program signal acoustically reproduced by the speaker (page 14, lines 15 to 24). The microphone 230 is for detecting the acoustic source identification signal produced by the speaker 220 and for converting it to an electrical signal, which may be wirelessly transmitted to the amplifier 240 (page 14, line 36 to page 15, line 6). The wireless transmission implies the presence of a second transmitting means connected to the microphone and a corresponding receiving means connected to the amplifier 240. The correlator 270 is for detecting the amplified signal as being indicative of the signal source (page 17, lines 15 to 21).

Thus, one difference between the embodiment according to Fig. 2A of D2 and the subject-matter of claim 1 is that in accordance with the claim the signal detector means, corresponding to the personal monitor 200 of D2, is movable with respect to the second transmitting means.

5.2.4 In the alternative arrangement according to Fig. 2B, the transmitter 231 of the first unit 241 corresponds to the second transmitting means as defined in claim 1 and the second unit 242 corresponds to the signal detector means. Since the converted survey signal is
transmitted and received by means of antennas 232 and 233, it is implicit that it is a non-acoustic radiated signal. The first unit 241 is intended to be worn by an audience member, e.g. a child, whereas the second unit 242 is contained within an enclosure containing the remainder of monitor 200 (page 15, lines 12 to 20). The monitor may be physically delivered to a centralized facility, implying that it is portable (page 18, lines 2 to 4). The detection range of the signal detector means must be such as to cover at least the distance between the first unit 241 and the second unit 242 in order to detect the signal radiated by the first unit. D2 does not specify this distance relative to a distance from the speaker at which the audience member cannot hear the acoustic source identification signal as reproduced by the speaker.

Hence, the subject-matter of claim 1 differs from the embodiment according to Fig. 2B at least in that the claim requires that the portable signal detector means is adapted to be worn, or accommodated in an article of clothing worn, by a person listening to the programming signal acoustically reproduced by the speaker, and in that the second transmitting means and the detector means are such that the signal detector means is effective to detect the non-acoustic radiated signal at a distance from the non-acoustic radiated signal transmitting means, which is substantially greater than the appreciable distance in order to be suitable for normal listening to said programming signal.

5.2.5 The respondent argued that the personal monitor of Fig. 2B, which includes an antenna 233 and a receiver 234, need not be bigger than the personal monitor 200
of Fig. 2A, which, instead of the antenna and receiver, includes microphone 230 and amplifier 240. Since the monitor 200 of Fig. 2A was explicitly described as adapted to be worn by an audience member and the monitor of Fig. 2B was otherwise functionally the same as the one of Fig. 2A, it was clear that the personal monitor of Fig. 2B was also be adapted to be worn.

The board does not accept this argument. The suggested implementation of the monitor of Fig. 2B is neither explicitly nor implicitly described in D2. Whether or not the implementation would be obvious to the skilled reader, rather than implied by the content of D2, is not relevant here, since D2 is a document within the meaning of Article 54(3) EPC (see point 5.2.1) and, hence, may not be considered in relation to the question of inventive step (Article 56 EPC).

5.2.6 Since none of the other parts of D2 appears relevant to the question of novelty, the board concludes that the subject-matter of claim 1 is new over the content of D2.

5.3 Documents D6 and D4

5.3.1 D6 is state of the art pursuant to Article 54(3) and (4) EPC for all contracting states designated in the patent in suit. The audience survey device described in D6 is based on recording program samples ("hearing samples") by means of a monitor which may be worn by a test person (page 2, lines 28 to 30 and 35 to 36). At a later stage, these recorded program samples are transmitted, either via a modem or by mail, to a remote centre which correlates the samples with simultaneously recorded samples of one or more programs in order to
evaluate the listening behaviour of the test person (page 3, lines 26 to 33). Whereas D6 appeared \textit{prima facie} highly relevant to the question of novelty in respect of a previous version of claim 1, the subject-matter of present claim 1 is thus particularly distinguished from the device described in D6 in that the claimed system provides for a survey signal which is to be combined with the programming signal and to be detected at the receiver site. At the oral proceedings the respondent did not argue lack of novelty on the basis of D6.

5.3.2 D4 does not disclose second transmitting means for transmitting the converted survey signal as a non-acoustic radiated signal; the electrical signals from microphone 7 are directly input to the detection circuit 11 (see the drawing and col. 3, lines 24 to 27). When the detection circuit 11 detects the survey signal, it produces a store signal, \textit{i.e.} information on time of day or incidence of the survey signal, which is stored in a memory 13 (col. 3, line 55 to col. 4, line 5). This information, \textit{i.e.} not a signal corresponding to the survey signal itself, may subsequently be dumped into another suitable memory (col. 4, lines 24 to 29). At the oral proceedings the respondent did not argue lack of novelty on the basis of D4.

5.3.3 For the above reasons, the subject-matter of claim 1 is new having regard to the content of D2 and D6 and the disclosure of D4. The board sees no reason to question the novelty of claim 1 having regard to any of the other documents on file. Further, the board notes that each of the claims 2 to 8 define only additional
features in combination with the system according to claim 1.

5.3.4 The board thus concludes that the subject-matter of claims 1 to 8 is new having regard to the available documents (Articles 52(1) and 54 EPC).

5.4 In view of the above, since the patent was revoked by the opposition division for lack of novelty of the subject-matter of claim 1 and of claim 10, i.e. a method claim corresponding to claim 1, which has been deleted by the appellant, the decision is to be set aside.

6. **Remittal to the first instance - Article 111(1) EPC**

6.1 Present independent claim 9 substantially corresponds to claim 14 as granted. Each of the sets of claims on which the impugned decision was based also included an independent claim 14 corresponding to claim 14 as granted. However, neither the impugned decision nor any of the communications sent by the opposition division contains a statement as to whether or not the subject-matter of this claim is new, even though the opponent invoked the corresponding ground for opposition pursuant to Article 100(a) EPC against claim 14 as granted and argued that its subject-matter was not new. The other opposition grounds, i.e. pursuant to Article 100(c) EPC against claim 14 and based on lack of inventive step against inter alia claim 1 have also not been dealt with by the opposition division in their communications and/or decision.
6.2 In order not to deprive the parties of an examination by two instances, the board thus considers it appropriate to remit the case to the first instance for further prosecution pursuant to Article 111(1) EPC.

6.3 The board notes that the opposition division did not admit the opponent's arguments relating to Article 123(2) EPC (see the decision, point 2 of the reasons, and the minutes of the oral proceedings, point 4.2). The board considers it appropriate to emphasize that, without prejudice to Article 111(2) EPC, in accordance with Article 102(3) EPC concerning the maintenance of a patent in amended form, in case of amendments made by the proprietor during the opposition proceedings, such amendments are to be fully examined as to their compatibility with the requirements of the EPC, e.g. Article 123 EPC (see also G 9/91, point 19 of the reasons, OJ EPO 1993, 408).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar: The Chairman:

D. Magliano A. S. Clelland