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Datasheet for the decision of 1 August 2019

Case Number: T 1689/14 - 3.5.02

Application Number: 08103611.3

Publication Number: 1998447

IPC: H03J1/00

Language of the proceedings: EN

Title of invention:
Method for estimating the type of broadcast for minimizing the time for channel installation

Patent Proprietor:
Vestel Elektronik Sanayi ve Ticaret A.S.

Opponent:
Interessengemeinschaft für Rundfunkschutzrechte e.V.

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
Inventive step - main request - patent in amended form (yes)

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Case Number: T 1689/14 - 3.5.02

D E C I S I O N
of Technical Board of Appeal 3.5.02
of 1 August 2019

Appellant: (Patent Proprietor)	Vestel Elektronik Sanayi ve Ticaret A.S. Organize Sanayi Bölgesi 45030 Manisa (TR)
Representative:	Cayli, Hülya Paragon Consultancy Inc. Koza Sokak No: 63/2 GOP 06540 Ankara (TR)
Respondent: (Opponent)	Interessengemeinschaft für Rundfunkschutzrechte e.V. Hohenzollernstrasse 11-13 40211 Düsseldorf (DE)
Representative:	Pröll, Jürgen Die Patenterie GbR Patent- und Rechtsanwaltssozietät Leibnizstraße 6 95447 Bayreuth (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 10 June 2014 revoking European patent No. 1998447 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	R. Lord
Members:	C. Vassoille
	W. Ungler

Summary of Facts and Submissions

I. This is an appeal of the patent proprietor against the decision of the opposition division to revoke European patent no. 1 998 447 for lack of novelty.

II. The following document is relevant for the present decision:

D1: DE 10 2005 051 696 B3

III. Oral proceedings before the board took place on 1 August 2019 in the absence of the respondent.

The appellant (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained in the following version:
Claims: No. 1 to 16 of the main request filed with the statement of grounds of appeal.
Description: Pages 2 and 3 of the patent specification.
Drawings: Figures 1 and 2 of the patent specification.

The respondent (opponent) requested in writing in their response to the statement of grounds of appeal dated 9 February 2015 that the appeal be dismissed.

IV. Claim 1 of the appellant's sole request (patent in amended form) reads as follows:

"A method for providing a channel search for a system having a first and a second tuner for receiving analog and digital signals within a given frequency spectrum, comprising the steps:
• Determining a frequency spectrum for receiving analog and digital signals

• Searching the given frequency spectrum in predetermined steps
• Extracting power level distribution through said frequency spectrum, where said frequency spectrum contains broadcast signals, and where broadcast signals can be digital broadcast signals or analog broadcast signals
• Calculating the power level within a given bandwidth at each predefined step size
• Storing the power level distribution in a first memory unit
• Estimating broadcast types on the whole frequency spectrum by using the power level distribution
• Storing said estimated broadcast types for said frequency spectrum in the first memory unit.
• Starting the channel search for a frequency range within said frequency spectrum
characterized in that, the method further comprises the steps of;
• In order to receive broadcast signals, tuning of said first or said second tuner with respect to the estimated broadcast type
• If said estimated broadcast type matches with received broadcast type, storing the channel in a second memory unit and continuing channel search within said frequency spectrum
• If said estimated broadcast type does not match with said received broadcast type, tuning to the other tuner within the system for storing the channel in said second memory unit and for continuing said channel search."

Claims 2 to 14 are dependent on claim 1.

Independent claim 15 reads as follows:

"A system having a first and a second tuner for receiving analog and digital signals within a given frequency spectrum, comprising:
• means for determining a frequency spectrum for receiving analog and digital signals
• means for searching the given frequency spectrum in predetermined steps
• means for extracting power level distribution through said frequency spectrum, where said frequency spectrum contains broadcast signals and where broadcast signals can be digital broadcast signals or analog broadcast signals
• means for calculating the power level within a given bandwidth at each predefined step size
• a first memory unit for storing the power level distribution
• means for estimating broadcast types on the whole frequency spectrum by using power level distribution
• a first memory unit for storing said estimated broadcast types for said frequency spectrum
• means for channel search for a frequency range within said frequency spectrum
characterized in that, it further comprises;
• means for tuning to said first or said second tuner with respect to estimated broadcast type
• means for deciding whether the estimated broadcast type matches with received broadcast type
• a second memory unit for storing the found channels if said estimated broadcast type matches with received broadcast type
• if said estimated broadcast type does not match with said received broadcast type, tuning to the other tuner within the system for storing the channel in said second memory unit and for continuing said channel search."

Claim 16 is dependent on claim 15.

V. The arguments of the appellant which are relevant for the present decision are as follows:

Document D1 did not disclose the feature of tuning of the first or the second tuner with respect to the estimated broadcast type in order to receive broadcast signals.

As was acknowledged by the opposition division in section 7.10.1 of the reasons for the decision under appeal, "Dl does not expressis verbis disclose to set up the tuner to the correct signal type..." but subsequently was considered to be implicit in D1. However, a disclosure could only be considered "implicit" if it was immediately apparent to the skilled person that nothing other than the alleged implicit feature forms part of the subject-matter disclosed. Regarding the above-mentioned feature of claim 1, it was obvious that multiple different equivalent solutions could be used by the person skilled in the art, when trying to analyse the frequency spectrum for the existence of either digital or analogue TV signals. No single one of such possible alternative solutions was mentioned in document Dl.

The person skilled in the art could for example simply run a first analysis and search for analogue TV signals in the frequency spectrum. After finishing the first analysis, the person skilled in the art could then run a second analysis and search for digital TV signals in the frequency spectrum. This solution was the simplest and most straight forward possibility to identify the analogue and digital TV signals in the frequency spectrum. However, this solution did not correspond to

the above feature of claim 1 of tuning the first or the second tuner with respect to the estimated broadcast type in order to receive broadcast signals. Document D1 therefore at least left the person skilled in the art with a plurality of different solutions as to how to analyse the frequency spectrum and did not disclose the above-mentioned feature of claim 1.

Furthermore, document D1 did not disclose the feature of claim 1 that if said estimated broadcast type does not match with said received broadcast type, tuning to the other tuner within the system for storing the channel in said second memory unit and for continuing said channel search. Document Dl did not even disclose the selection of a specific tuner. Document Dl, without disclosing a tuner selection, could not disclose the further feature of switching tuners.

Paragraph [0020] of document Dl disclosed regarding the tuning of tuners the following: "In einer besonders vorteilhaften Verfahrensvariante wird in einem ersten Suchlauf je ein bewerteter Signalpegel bei der jeweiligen Suchfrequenz im Hörfunk-Modus ermittelt und dann das Rundfunksignal in einem zweiten Suchlauf nur bei den Suchfrequenzen auf ein mögliches TV-Signal hin im TV Modus untersucht [...]. Der besondere Vorteil dabei ist, dass keine zeitaufwändige Umschaltung zwischen dem Hörfunk-Modus und dem TV-Modus für jede einzelne Suchfrequenz erforderlich ist."

The only switching of tuners in paragraph [0020] of document D1 therefore referred to the switching from the tuner that is used to determine the power level distribution to the tuner that is then used for analysing possible TV signals. However, none of the features disclosed in paragraph [0020] of document D1

referred to the switching between different tuners that were used for analysing TV signals.

Document D1 did not motivate the person skilled in the art to implement the distinguishing features. In particular, according to D1 no necessity was apparent to tune only one of the tuners with respect to the estimated broadcast type. In contrast, D1 only mentioned that after performing the power level-based pre-assessment for the different frequencies, the broadcast signals may be thoroughly analysed (see D1, paragraph [0047]: "In einem zweiten Suchlauf erfolgt nun eine gründliche Analyse..."). However, no possible implementation of this "thorough analysis" was disclosed by document D1.

Should the person skilled in the art, notwithstanding the missing motivation in document D1, have wanted to solve the problem of providing an implementation of the broadcast signal analysis starting from document D1, that person skilled in the art could have chosen one of a variety of possible solutions, as outlined above. The claimed solution, however, was not obvious and an inventive step of the person skilled in the art was therefore necessary to arrive at the claimed solution when starting from document D1 and being confronted with the objective technical problem of how to provide a faster channel search.

VI. The arguments of the respondent which are relevant for the present decision are as follows:

The characterising features of claim 1, in particular the feature that if said estimated broadcast type does not match with said received broadcast type, tuning to the other tuner within the system for storing the

channel in said second memory unit and for continuing said channel search, was disclosed in paragraph [0020] of document D1. In particular, paragraph [0020] disclosed that a power level distribution at the respective search frequency was determined in a first search and that the signal was subsequently examined in a second search only at the search frequencies of possible TV channels in a TV mode, whose determined power level exceeded a predetermined minimum level. According to D1, this eliminated the need for a time-consuming switching between a radio mode and TV mode for each individual search frequency.

Consequently, document D1 disclosed automatically switching to another tuner, if the estimated broadcast type did not match with the received broadcast type, and further storing the channel in the memory unit and continuing the channel search.

The subject-matter of claims 1 and 15 therefore lacked novelty in view of D1 or at least did not involve an inventive step, since document D1 already disclosed in paragraph [0020] the tuning to another tuner, if the estimated broadcast type did not match the received broadcast type.

Reasons for the Decision

1. The appeal is admissible.

2. *Non-attendance of the oral proceedings*

The respondent did not reply in substance to either the board's communication under Article 15(1) RPBA or the appellant's letter of 1 July 2019 and, due to their

absence at the oral proceedings, the respondent is treated as relying on their written case only (Article 15(3) RPBA).

3. Novelty (Article 54 EPC)

3.1 The subject-matter of claim 1 is new with respect to document D1, since this document does not disclose the characterising features of claim 1 in the context of a method for providing a channel search.

3.2 According to the teaching of document D1, a power level is determined in a first search run at a respective search frequency in a radio mode ("Hörfunk-Modus"). In a second search run the radio signal is subsequently examined only at the search frequencies of a possible TV signal in a TV mode ("TV-Modus"). The method is according to D1 advantageous, since no time consuming switching between a radio mode and TV mode is required for each individual search frequency (see paragraph [0020]).

3.3 Tuning a first or a second tuner with respect to, i.e. depending on, an estimated broadcast type in order to receive broadcast signals is, contrary to the respondent's opinion, not disclosed in D1. Rather, as has been submitted by the appellant, the only tuning of a first or a second tuner in D1 is the tuning of a first tuner that is used to determine the power level distribution in a radio mode and the tuning of a second tuner for subsequently analysing possible TV signals in a TV mode. These tuners however do not correspond to the first and second tuner of claim 1.

3.4 The opposition division in the decision under appeal came to the conclusion that when TV channels in D1 were

tuned by the user, it was implicit that the tuner was set-up to the saved TV-channel, in particular to its saved signal type, and referred in this respect to paragraph [0029] of D1 (see point 7.10.2 of the reasons for the decision under appeal).

The board does not agree with the opposition division on this point. Paragraph [0029] clearly refers to a situation where the user has switched on the TV again after a channel search has already been completed. The cited passage is therefore not pertinent as regards the tuning of a tuner with respect to an estimated broadcast type in the context of a channel search method in the sense of claim 1. Besides that, this passage neither mentions nor implies the tuning of a first or a second tuner depending on the estimated broadcast type in order to receive broadcast signals.

3.5 It is clear that document D1 in paragraph [0021] discloses the determination of different broadcast types, analogue or digital, during the second search run in the TV mode and, according to paragraph [0047] in particular, a "thorough analysis" of the broadcast signal. However, as has been argued by the appellant, no way to implement this analysis is taught by document Dl.

The board agrees with the appellant that there is more than one solution as to how to perform such a "thorough analysis" of the broadcast signals determined during the second search run in a TV mode, while none is described in document D1.

3.6 The board therefore has come to the conclusion that the subject-matter of claim 1 is new in the sense of

Article 54 EPC in view of document D1. The same applies correspondingly to the independent system claim 15.

4. Inventive step (Article 56 EPC)

4.1 The distinguishing features according to the characterising portion of claim 1 of the main request (see the reasons under point 3 above) involve an inventive step in the sense of Article 56 EPC in view of D1 and the common general knowledge of the skilled person.

4.2 The board understands that the appellant considers the objective technical problem of the distinguishing features corresponding to the characterising portion of claim 1 to be that of how to implement in D1 a thorough analysis of the TV signals, determined during the first channel search in the radio mode.

4.3 As has been argued by the appellant, D1 does not provide any details about how the analysis of the estimated broadcast types should be performed, and a simple and obvious way to analyse these signals in the second search run would indeed be to run a complete signal analysis with a first tuner, either analogue or digital, and then run another complete signal analysis with the other tuner, digital or analogue. The respondent did not provide any counter arguments in this respect.

4.4 The board further notes that document D1 in paragraph [0020] explicitly states that a time consuming switching between a radio mode and a TV mode, which is required for each individual search frequency, is to be avoided. It is therefore clear that document D1 teaches away from a solution according to the characterising

portion of claim 1, which provides for a corresponding switching between tuners for each search frequency in the event that the estimated broadcast type does not match with the received broadcast type. The skilled person, when starting from D1 and being confronted with the problem of how to implement a "thorough analysis" of the broadcast signal, therefore would have preferred a solution which requires less switching between tuners, such as performing a complete signal analysis with a first tuner, either analogue or digital, and then run another complete signal analysis with the respective other tuner, digital or analogue.

4.5 The board therefore agrees with the appellant on that the skilled person, when starting from D1, had no motivation to modify the method and system of document D1 such as to arrive at the claimed invention, in particular, since the implementation of the solution according to the invention would contradict the aim of D1. Neither document D1 nor the common general knowledge of the skilled person hence motivated the skilled person to implement a channel analysis according to the characterising portion of claim 1 and the respondent did not submit any arguments in this respect.

4.6 Switching between tuners for a single search frequency should be avoided according to D1 and therefore document D1 also provides no suggestion to achieve the advantage of a faster broadcast signal analysis by

- tuning a first or a second tuner with respect to an estimated broadcast type in order to receive broadcast signals, and
- if said estimated broadcast type matches with the received broadcast type, storing the channel in a

second memory unit and continuing channel search within said frequency spectrum, and

- if said estimated broadcast type does not match with said received broadcast type, further tuning to the other tuner for storing the channel in said second memory unit and continuing said channel search.

4.7 The board concludes that the method of claim 1 of the appellant's main request was not obvious to the person skilled in the art in the light of D1. Therefore, the subject-matter of claim 1 involves an inventive step in the sense of Article 56 EPC in view of document D1 and the common general knowledge of the skilled person.

5. Other matters

Claims 2 to 14 of the appellant's sole request are dependent on claim 1, and claim 15 defines a system which comprises system features corresponding to the method steps of claim 1. Claim 16 is dependent on claim 15. The above conclusion concerning inventive step therefore applies also to these claims. Since no objections to these claims have been raised by the respondent beyond those raised with respect to claim 1 as discussed above, the board concludes that none of these objections raised by the respondent prejudice the maintenance of the patent in the form of the appellant's main request. The board therefore has to accede to the request of the appellant.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:

   Claims: No. 1 to 16 of the main request filed with the statement of grounds of appeal.

   Description: Pages 2 and 3 of the patent specification.

   Drawings: Figures 1 and 2 of the patent specification.

The Registrar: The Chairman:

U. Bultmann R. Lord

Decision electronically authenticated