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Datasheet for the decision of 27 November 2012

Case Number: T 0721/09 - 3.5.04

Application Number: 03027757.8

Publication Number: 1420591

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Language of the proceedings: EN

Title of invention:
Electronic programme scheduling system

Patentee:
NTL Group Limited

Opponent:
Interessengemeinschaft
für Rundfunkschutzrechte e.V. (IGR e.V.)

Headword:

Relevant legal provisions:
EPC 1973 Art. 100(a)

Keyword:
Construction of claim
inventive step (yes)

Decisions cited:

Catchword:

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Case Number: T 0721/09 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 27 November 2012

Appellant: (Opponent)	Interessengemeinschaft für Rundfunkschutzrechte e.V. (IGR e.V.) Bahnstraße 62 40210 Düsseldorf (DE)
Representative:	Eichstädt, Alfred Maryniok & Partner, Kuhbergstraße 23 96317 Kronach (DE)
Respondent: (Patent Proprietor)	NTL Group Limited NTL House, Bartley Wood Business Park, Bartley Way Hook, Hampshire RG27 9XA (GB)
Representative:	Martin, Philip John Marks & Clerk LLP 62-68 Hills Road Cambridge CB2 1LA (GB)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted 17 February 2009 rejecting the opposition filed against European patent No. 1420591 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman: F. Edlinger
Members: M. Paci
B. Müller

Summary of Facts and Submissions

I. This is an appeal by the opponent against the decision of the opposition division rejecting the opposition.

II. Opposition had been filed against the patent as a whole, based on Article 100(a) EPC 1973 on the sole ground of lack of inventive step.

III. The following prior-art documents are relevant to the present decision:

D1: WO 97/49237 A1
D2: WO 97/13368 A1
D3: J. Cho et al., "Efficient Crawling Through URL Ordering", Computer Networks and ISDN Systems, Proceedings of the Seventh International World Wide Web Conference, Vol. 30, No. 1-7, April 1998, Brisbane, Pages 161-172, Elsevier Science Publishers B.V., ISSN: 0169-7552
D4: WO 98/56188 A2.

IV. In the decision under appeal the opposition division held that the subject-matter of claim 1 of the patent was inventive in view of D1 to D4.

V. In the statement of grounds of appeal the appellant (opponent) submitted that, based on a proper construction of claim 1 of the patent, the claimed method did not involve an inventive step in view of D1 or D2 in combination with D3 or D4.

VI. In a communication annexed to the summons to oral proceedings the board made observations on the construction of claim 1 of the patent.

VII. With a letter dated 29 October 2012, the respondent (patent proprietor) filed claims according to first and second auxiliary requests, as well as new description pages 6 and 14 for these requests.

VIII. Oral proceedings were held on 27 November 2012. Both parties were represented. At the end of the oral proceedings the board's decision was announced.

IX. The appellant's final requests are that the decision under appeal be set aside and that the patent be revoked in its entirety.

X. The respondent's final requests are that the appeal be dismissed, otherwise that the patent be maintained according to the first or second auxiliary request.

XI. Claim 1 of the patent reads as follows:

"A method using a computer of gathering information for a programme database (76) for use in scheduling a virtual channel, the database comprising programme information for a plurality of programmes, including for each programme the programme start time, a real channel or programme source the programme is available from at that start time, and programme identification information; the method comprising automatically performing the following steps in sequence:

i) accessing a web page;

ii) storing the web page's uniform resource locator address;

iii) searching the web page for information identifying a programme suitable for scheduling on the virtual channel and, if found, retrieving programme information for the programme, and adding the programme information to the programme database;

iv) identifying a hypertext link from the web page to a new web page or, if none, returning to a previous web page until a link to a new web page is found; and

v) accessing the new web page and repeating steps (ii) to (iv)."

Claims 2 to 6 of the patent refer to the method of claim 1.

The claims according to the first and second auxiliary requests are of no relevance to the present decision.

XII. The opposition division's reasoning in the decision under appeal can be summarised as follows:

D1 discloses a method for generating an EPG (electronic programme guide) for a television system. An internet database is created from commands including links to internet sites related to programmes displayed on the EPG. If the viewer is viewing the EPG on a platform that is web-enabled, then a linked site can be accessed directly from the EPG.

D2 discloses a method using a computer which assists the viewer in utilising television schedule information and in linking it to a database in order to search and retrieve information. The information is contextually related to television programmes within the television schedule information. Schedule data are provided to the viewer from a remote database via the internet and are used to generate a television schedule guide. The user can retrieve this generated television schedule guide when desired.

The subject-matter of claim 1 differs from the methods disclosed in D1 and D2 in that it gathers information

for a programme database for use in scheduling a virtual channel and in that it automatically performs steps (iii) to (v) of claim 1.

D3 discloses a crawler for retrieving and ordering webpages for a search engine. However, there is no hint in D3 of gathering EPG information for a database. The same applies to D4 which discloses a browsing software which allows searching for a link on a webpage in order to retrieve and display linked webpages.

Thus, even if the skilled person had combined the teachings of D1 or D2 with those of D3 or D4, the result would not have been a method of gathering information for a programme database, as claimed in granted claim 1, but only a method for enabling a user of a television schedule system to access additional information about a television programme on the internet by following a link.

For these reasons the method of claim 1 is not rendered obvious by D1 to D4.

XIII. The appellant essentially argued as follows:

The method of claim 1 of the granted patent does not involve an inventive step in view of D2 in combination with the teaching of D3. Alternatively, the same conclusion may also be reached from each of the following combinations of prior-art disclosures: D1 and D3, D1 and D4, and D2 and D4.

Construction of claim 1 of the granted patent

The method of claim 1 is a method of gathering information for a programme database for use in

scheduling a virtual channel. According to the wording of the claim, the programme database must be suitable for use in scheduling a virtual channel. However, only the database, not the information gathered by the method of claim 1, is required to be suitable for use in scheduling a virtual channel. This is derivable from figure 6 and paragraphs [0015] and [0057] of the patent specification which disclose that the database also receives information via another data input (see data feed 211). Moreover, it is irrelevant to the method of claim 1 how the virtual channel is organised because claim 1 does not comprise a step of creating a virtual channel.

Inventive step in view of D2 and D3

D2 discloses a television schedule guide stored on a website as one or more files which can be accessed by any viewer having access to the World Wide Web (see page 26, lines 12 to 31). The guide is capable of creating "personalized TV listings" for a viewer, whereby each such listing is essentially the same as the "virtual channel" of claim 1. Furthermore, D2 discloses that additional information about the programmes can be found on the web, by providing either a web search engine (see page 35, lines 3 to 8) or a link to another website (see page 26, lines 29 to 31). Importantly, D2 specifies that the links pointing to websites of interest may be found automatically by a "virtual agent" that searches existing websites (see page 28, lines 7 to 17).

The only features of the method of claim 1 which are not disclosed in D2 are the web-crawling steps (iii) to (v).

The objective technical problem can thus be formulated as being to improve the retrieval of additional information from the internet.

It would have been obvious for the skilled person to solve this problem by using a web crawler as described on page 1 of D3, thereby arriving at the subject-matter of claim 1.

Hence the method of claim 1 does not involve an inventive step in view of D2 and D3.

Inventive step in view of D2 and D4, D1 and D3, or D2 and D4

A similar argument can be made in which D2 is replaced by D1 and/or D3 is replaced by D4.

XIV. The respondent's arguments can be summarised as follows:

Construction of claim 1 of the granted patent

The method of claim 1 is a "method using a computer of gathering information for a programme database (76) for use in scheduling a virtual channel". It is clear from this wording, but also from the remainder of the claim, all read in the light of the description and drawings, that the expression "for use in scheduling a virtual channel" refers to both the gathered information and the programme database, not merely to the programme database as alleged by the opponent. Moreover, a "virtual channel" implies a continuous stream of material. A mere list of non-continuous programmes is not a virtual channel.

Inventive step in view of D2 and D3

D2 discloses a method of using a database for creating an EPG (figure 2), not for creating a virtual channel. Moreover, the method of D2 does not gather information for a programme database. Lastly, D2 does not disclose steps (i) to (v) of claim 1. In view of this disclosure, the present invention solves the problem of providing a way for the database to be created at the schedule provider.

D3 discloses crawling for a completely different purpose, namely that of ranking pages in order of importance, so that the user is provided with ordered links in response to entering a search query. D3 does not disclose gathering data of a particular type for constructing a database. D3 does not even disclose exploring a tree of webpages as set out in steps (i) to (v).

For these reasons, the skilled person would not have looked for D3 when starting from D2. The combination of D2 and D3 results from hindsight in the light of the present patent. Moreover, even if the skilled person had combined the teachings of D2 and D3, he would still not have arrived at steps (i) to (v) of claim 1.

Hence the method of claim 1 involves an inventive step in view of D2 and D3.

A similar reasoning applies when D2 is replaced by D1 and/or D3 is replaced by D4.

Reasons for the Decision

1. The appeal is admissible.

Claims of the patent as granted

Construction of claim 1

2. The established case law of the boards of appeal concerning the general principles for the construction of claims, to which this board also subscribes, is summarised in the Case Law of the Boards of Appeal of the EPO, 6th edition 2010, section II.B.5.1, as follows:

> "The skilled person, when considering a claim, should rule out interpretations which are illogical or which do not make technical sense. He should try, with synthetical propensity, i.e. building up rather than tearing down, to arrive at an interpretation of the claim which is **technically sensible** and takes into account the whole disclosure of the patent. The patent must be construed by **a mind willing to understand**, not a mind desirous of misunderstanding".

3. In the board's view, the following points are important for the proper construction of claim 1:

(a) The expression "for use" in the phrase "A method using a computer of gathering information for a programme database (76) for use in scheduling a virtual channel" is to be construed as meaning "suitable for use". The parties do not dispute this, but disagree on whether the expression "for use" refers to both the

"information" gathered by the claimed method and the "programme database" (the respondent's view) or merely to the "programme database" (the appellant's view). On this point, the board shares the respondent's interpretation that the information gathered by the method of claim 1 must be suitable for scheduling a virtual channel. This construction derives firstly from step (iii) of claim 1 which indicates that the information gathered is found by searching a webpage "for information identifying a programme suitable for scheduling on a virtual channel" and that this retrieved programme information is added to the database. Secondly, it is also supported by paragraph [0015] of the description of the patent specification which states unambiguously that the "Internet web-spider search means ... retrieve programme **schedule** information from the Internet and add it to the database" (emphasis added by the board). The fact that additional data may be received from an additional feed (211; see paragraph [0057] and figure 6) does not alter the meaning of the programme information that is gathered by the method of claim 1.

(b) As to the meaning of the expression "virtual channel", the appellant submitted that it could be, in its simplest form, no more than a list of programmes identified by their name and starting time, such as a personalised TV listing for a viewer. The respondent countered that a "virtual channel" was more than a mere list of non-continuous programmes because the term "channel", given its normal meaning in the relevant field of broadcasting, implied a continuous stream of material. The board shares the respondent's interpretation only in so far as the information gathered for each programme according to claim 1, namely start time, source and identification

information, has to be suitable for scheduling a virtual channel, which is stated to be essentially a series of programmes from diverse sources intended to be shown in succession (see paragraph [0009] of the patent specification). The virtual channel may be defined by a user "as identical to a real channel" (see paragraph [0036] of the patent specification). The specific structure of the virtual channels (90; 320) disclosed in figures 2 and 8A supports this understanding, whereas there is no disclosure in the patent specification of a virtual channel being a mere personalised TV listing which allows a viewer to call up favourite programmes. However, whether the virtual channel is actually continuous or not is irrelevant because claim 1 does not comprise a step of creating a virtual channel. This last point is not disputed by the parties.

(c) The method of claim 1 contains no limitation as to the type of apparatus/system on which it is to be carried out, except for the feature that it uses a computer. According to the description, the database of claim 1 could be physically at the user's location (i.e. locally in the set-top box) or at a remote location (see paragraphs [0029] and [0044] of the patent specification), or even distributed over a number of locations (see paragraph [0029], sentence bridging columns 8 and 9, of the patent specification). This interpretation is not disputed by the parties.

(d) The "programmes" of claim 1 are not limited to television programmes (see paragraph [0067] of the patent specification).

Article 100(a) EPC 1973 - inventive step

4. Obviousness in view of D2 and D3

4.1 During the oral proceedings the appellant argued about inventive step solely on the basis of D2 in combination with D3, thereby effectively presenting D2 as the closest prior art. Since the respondent did not raise any objection against D2 being regarded as the **closest prior art** and since also the board considers D2 to be the closest prior art, the matter needs no further discussion.

4.2 D2 discloses a method for allowing a viewer to retrieve, search, select and interact with television schedule information in a remote database located, for instance, on the World Wide Web (see page 1, lines 8 to 14). The television schedule information may be displayed on the viewer's terminal in the format of an EPG (see page 26, lines 12 to 31) and may be customised by the viewer to create "personalized TV listings" (see page 5, lines 16 to 20, and page 26, lines 21 to 28). In addition, the remote database allows the user to access supplementary information not contained in the database, either by providing weblinks to other websites (see page 26, lines 29 to 31, and page 35, lines 3 to 7) or by including a search engine allowing the viewer to search the web for particular types of programmes (see page 27, lines 12 to 17, and page 35, lines 3 to 7). Finally, the system of D2 may also include a "virtual agent" that searches existing websites and points to websites that may interest the viewer (see page 28, lines 12 to 17).

It is common ground between the parties that D2 discloses the features listed in the previous paragraph.

The appellant argued that the "personalized TV listings" of D2 could be regarded as a "virtual channel" within the meaning of claim 1. The board is not fully convinced by this argument for the reasons given under point 3(b) *supra*. However, this is of no importance for claim 1 because the claimed method does not comprise a step of creating a virtual channel. Moreover, for the reasons set out in point 3(b) *supra*, there is no relevant difference between information (or a programme database) suitable for use in scheduling a virtual channel or for use in scheduling a conventional EPG, which is disclosed in D2.

The respondent submitted, correctly in the board's view, that D2 focuses on retrieving, searching, selecting and interacting with information in a remote database, but does not disclose how the database was created.

The board regards it nevertheless as implicit in the disclosure of D2 that the information in the remote database must have been created one way or another. From the text passage on page 28, lines 12 to 17, it may be understood that weblinks pointing to websites of interest to the viewer may be automatically added to the database by a "virtual agent" searching existing websites on the internet. The board thus considers that steps (i) and (ii) of claim 1 may be regarded as anticipated by this virtual agent.

Thus, in conclusion as to the features of claim 1 disclosed by D2, the board holds that the method of

claim 1 **differs** from the information-gathering method which is implicit as part of the television schedule information disclosed in D2 in that it automatically performs steps (iii) to (v).

4.3 As to the objective technical problem solved by the method of claim 1, the appellant argued that it is to improve the retrieval of additional information from the internet, whereas the respondent submitted that it is to provide a way for the database to be created at the schedule provider.

In the board's view, the technical effect achieved by steps (iii) to (v), in combination with the other features of the claim, consists in providing a novel way of gathering information, suitable for use in scheduling a virtual channel, for a programme database. According to the board, the **objective technical problem** should thus be generally formulated as being how to gather information, suitable for use in scheduling a virtual channel, for a programme database. Simply improving the retrieval of the additional information disclosed in D2 would not take into account the fact that the claimed method is about gathering information for a programme database from which a virtual channel may be created. On the other hand, creating the database at the schedule provider is not an essential feature of claim 1 (see point 3(b) *supra*).

4.4 D3 discloses a method for efficiently crawling through webpages for the purpose of ordering/ranking webpages in order of importance for a web search engine. The purpose of the method of D3 thus differs from that of the method of claim 1 which is to gather data of a particular type (programme schedule information) to be added to a programme database.

The appellant submitted that, in view of D3, it would have been obvious to automatically crawl through webpages to gather programme schedule information for the programme database of D2.

The board is not convinced by this argument for the following reasons:

The virtual agent of D2 automatically searches websites of interest to the viewer on the internet and adds to the programme database hypertext links pointing to these websites (see page 28, lines 12 to 17). However, the board does not regard such links to be programme schedule information, i.e. information suitable for use in scheduling a virtual channel or an EPG. Indeed, programme schedule information must contain at least the information specified in claim 1, namely its start time, the channel or source from which it is available and programme identification information.

The board therefore considers that D2, including its "virtual agent", does not teach the gathering of programme scheduling information via a web-crawler in order to add this information to a programme database. D3 does not provide this teaching either, because the method of D3 addresses the different purpose of ordering/ranking webpages in order of importance for a web search engine. For these reasons, the board concurs with the respondent that the skilled person would have combined the teachings of D2 and D3 only as the result of an inadmissible *ex post facto* analysis in the light of the present patent. Moreover, even if the skilled person had nevertheless combined D2 and D3, the combined teachings of these documents would still not have taught the skilled person to gather programme

scheduling information via a web-crawler in order to add this information to a programme database, as defined in steps (iii) to (v) of claim 1.

4.5 For the above reasons, the board concludes that the appellant has not convincingly shown that the subject-matter of claim 1 does not involve an inventive step in view of D2 and D3.

5. Obviousness in view of D1 and D3, D2 and D4, or D1 and D4

D1, like D2, does not disclose how the programme schedule information contained in the programme database at the cable headend has been obtained. Nor is there any disclosure or teaching in D1 that the programme schedule information could be automatically gathered from webpages on the internet and added to a programme database.

D4 discloses a single uniform interface for a set-top box allowing a viewer to navigate among websites and television stations (see page 15, last paragraph, and figures 5, 7 and 8). The interface can display an EPG and related weblinks on the same page (see figure 7). There is no mention in D4 of a web-crawler, and neither a disclosure nor a suggestion that programme scheduling information could be automatically gathered from webpages on the internet and added to a programme database.

The appellant has submitted no argument as to why D1 would be better suited than D2 as a starting point in order to show that the opposition division was wrong in its judgement, nor any argument as to why any feature

of D4 would be more easily combined with the closest prior art than those of D3.

Hence, the appellant's arguments concerning the other possible combinations of prior art are not convincing and the reasoning under section 4 above applies *mutatis mutandis* when D2 is replaced by D1 and/or D3 is replaced by D4.

6. The conclusions reached above for the method of claim 1 on inventive step also apply to the subject-matter of any of the claims 2 to 6. The appellant has not argued to the contrary.

Conclusions

7. Since the board upholds the decision under appeal based on the claims of the patent as granted, thereby granting the respondent's main request, the respondent's first and second auxiliary requests need not be examined.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

K. Boelicke F. Edlinger

Decision electronically authenticated