

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen
(D) No distribution

**Datasheet for the decision
of 12 January 2011**

Case Number: T 1972/07 - 3.5.04

Application Number: 03025066.6

Publication Number: 1387583

IPC: H04N 7/173

Language of the proceedings: EN

Title of invention:

Automatic electronic programme scheduling system

Patentee:

NTL Group Limited

Opponent:

IGR GmbH & Co. KG.

Headword:

-

Relevant legal provisions:

-

Relevant legal provisions (EPC 1973):

EPC Art. 54, 56, 100(a)

Keyword:

"Novelty (yes)"

"Inventive step (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 1972/07 - 3.5.04

D E C I S I O N
of the Technical Board of Appeal 3.5.04
of 12 January 2011

Appellant: IGR GmbH & Co. KG.
(Opponent) Bahnstraße 62
D-40210 Düsseldorf (DE)

Representative: Eichstädt, Alfred
Maryniok & Eichstädt
Kuhbergstraße 23
D-96317 Kronach (DE)

Respondent: NTL Group Limited
(Patent Proprietor) 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 8 October 2007
rejecting the opposition filed against European
patent No. 1387583 pursuant to Article 102(2)
EPC 1973.

Composition of the Board:

Chairman: F. Edlinger
Members: C. Kunzelmann
C. Vallet

Summary of Facts and Submissions

I. The appeal is against the decision of the opposition division to reject the opposition against European patent No. 1 387 583 under Article 102(2) EPC 1973.

II. Claim 1 of the patent as granted reads as follows:

"A method of building a personal channel schedule comprising

i) receiving user preference information characterising a user's preferred programmes;

ii) receiving programme descriptor information for broadcast programmes;

iii) scoring the broadcast programmes based on the user preference information using the programme descriptor information;

iv) selecting a first programme using the results of the scoring and adding this to a personal channel schedule;

v) identifying either later adjoining programmes which start after the end of the last programme in the schedule or earlier adjoining programmes which finish before the start of the first programme in the schedule;

vi) scoring the adjoining programmes based on the user preference information;

vii) selecting a second programme from the adjoining programmes using the results of scoring the adjoining programmes;

viii) adding the second programme to the schedule; and

ix) repeating steps (v)-(viii) to build up the personal channel schedule."

Claim 6 of the patent as granted reads as follows:

"A computer program to, when running, perform the method of any one of claims 1 to 5."

Claim 7 of the patent as granted reads as follows:

"A computer readable medium storing the computer program of claim 6."

Claims 2 to 5 of the patent as granted are dependent.

III. The opposition to the patent was based on two grounds for opposition under Article 100(a) EPC 1973, namely that the subject-matter of claims 1, 6 and 7 lacked novelty (Article 54 EPC 1973) and that the subject-matter of all the claims lacked inventive step (Article 56 EPC 1973).

IV. In the decision under appeal the opposition division referred *inter alia* to the following prior-art documents:

D10: DE 42 01 031 C2,

D11: DE 44 06 091 A1,

D12: EP 0 191 149 B1 and

D13: EP 0 112 589 A1.

The opposition division found that the subject-matter of all the claims was new in view of both D10 and D11 and also involved an inventive step.

- V. The opponent lodged the present appeal and set out the reasons why it disagreed with that finding.
- VI. In a letter dated 20 March 2008, filed in response to the communication of the grounds of appeal, the respondent briefly asserted that the opposition division was correct in their decision to maintain the patent unamended.
- VII. The board issued a communication dated 21 October 2010 accompanying a summons to oral proceedings.
- VIII. With a letter dated 9 December 2010, the respondent filed description pages 6, 7 and 12 as well as claims 1 to 6 headed "First auxiliary request claims" and claims 1 to 6 headed "Second auxiliary request claims".
- IX. Oral proceedings before the board took place on 12 January 2011. The parties' final requests were as follows:

The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked in its entirety.

As a main request the respondent (patentee) requested that the appeal be dismissed.

As a first auxiliary request, the respondent requested that the patent be maintained as granted, but with new description pages 6, 7 and 12 filed with the letter of 9 December 2010. As a second and third auxiliary request, respectively, the respondent requested that

the patent be maintained on the basis of new claims 1 to 6 filed with the letter of 9 December 2010 (headed in that letter as "First auxiliary request claims" and "Second auxiliary request claims", respectively).

At the end of the oral proceedings the chairman announced the board's decision.

X. The reasons for the decision under appeal can be summarised as follows:

Each of D10 and D11 disclosed features (i) to (iv), (vii) and (ix) of claim 1. But neither D10 nor D11 disclosed features (v), (vi) and (viii) of claim 1. Each of D10 and D11 disclosed identifying all those broadcast programmes which belonged to a user's interest profile. But they did not disclose scoring those broadcast programmes and selecting between broadcast programmes to be added to a schedule. Scoring implied a numerical valuation of a variable degree. In particular neither D10 nor D11 disclosed the concept of adjoining programmes, as specified in feature (v) and further elaborated in features (vi) and (viii). Hence the subject-matter of claim 1 was considered to be new.

D12 referred to the possibility of a clash in timing of broadcast programmes to be recorded. According to D12 such "collisions" were indicated in a table, and the user could then set the priority as to which broadcast programme was to be recorded completely. This taught away from the claimed invention, according to which an attempt was made to construct a schedule with non-overlapping broadcast programmes. Furthermore, the opposition division held that the opponent had not

submitted arguments as to how a combination of D10 or D11 with D12 would lead to the subject-matter of claim 1. Hence the subject-matter of claim 1 was considered to involve an inventive step.

The findings set out in respect of claim 1 applied also to independent claims 6 and 7.

The opposition division also noted that the opponent had not used documents D1 to D9 and D13 in the reasoning as to novelty or inventive step.

XI. The appellant's arguments can be summarised as follows:

Each of D10 and D11 destroyed the novelty of the subject-matter of claims 1, 6 and 7. They disclosed not only features (i) to (iv), (vii) and (ix) of claim 1. They also disclosed identifying adjoining broadcast programmes which started after the end of a first broadcast programme selected by a user. These adjoining broadcast programmes were scored. The scoring was performed by checking whether they matched the user's interest profile. Hence a valuation, namely match or no match, was carried out. If an adjoining programme matching the user's interest profile existed, it was selected and added to the schedule. The resulting schedules could have time gaps between succeeding broadcast programmes, or they could include overlapping broadcast programmes. However, such time gaps could also be present in a schedule built according to the method of claim 1. Claim 1 was also silent about how to handle the situation that broadcast programmes suitable for the personal channel schedule were overlapping. The patent specification, for instance in figure 2,

disclosed such time gaps and overlapping broadcast programmes. There was no difference between a programme preview as disclosed in D10 or D11 and the programme channel schedule as specified in claim 1.

The findings set out in respect of claim 1 applied also to claims 6 and 7 because their technical contents were the same.

If one of the features of claim 1 established novelty over D10 or D11 then it was not sufficient to establish inventive step. Furthermore D10 and D11 disclosed the user selecting from preselected programmes or the user editing, e.g. deleting or confirming, preselected programmes. The reason for such a selection viz. deletion or confirmation was the avoidance of overlapping programmes. Hence the user would have used the possibilities disclosed in D10 or D11 so that the resulting succession of programmes would have established a personal channel schedule. Moreover, avoiding the overlapping of broadcast programmes was disclosed in each of D12 and D13. Thus, each of D10 and D11, when read in combination with D12 or D13, rendered the subject-matter of claim 1 obvious.

Furthermore, none of the dependent claims specified inventive subject-matter.

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

None of the prior-art documents on file disclosed a method of building a personal channel schedule. A personal channel corresponded to a normal television channel. Thus at any point in time only one programme

was being broadcast on the personal channel. According to claim 1, as understood by a person skilled in the art, the building of the personal channel schedule started with one programme. Subsequently, a second, adjoining, programme was added to the personal channel schedule. Then a third programme, adjoining to the second programme, was added to the personal channel schedule, and so on to build up a succession of programmes forming a personal channel schedule.

Each of D10 and D11 disclosed selecting from the plurality of programmes those which matched a user's interest profile. However the starting time of the programmes was irrelevant. Neither D10 nor D11 disclosed the selection of adjoining programmes. Neither D10 nor D11 disclosed the scoring of programmes based on user preference information. Checking whether a programme matched a user's interest profile was different from scoring a programme, which implied a programme's numerical valuation on a scale. A user presented with a pre-selection of programmes matching his personal interest profile in accordance with the teaching of D10 or D11 would simply select one of the programmes. He would not start building a personal channel schedule. A personal channel was better tailored to the user's needs than the programme plans of D10 or D11.

Reasons for the Decision

1. The appeal is admissible.

2. *The meaning of the expression "building a personal channel schedule" in the opposed patent*
- 2.1 Claim 1 specifies in step (iv) that a first programme is selected using the results of the scoring and is added to the personal channel schedule. In the context of claim 1 any programmes present in the personal channel schedule before the "first programme" is added are irrelevant, since the claim specifies a method of building a personal channel schedule, not the resulting personal channel schedule. Thus the "first programme" may be considered as an initial programme of the claimed method of building a personal channel schedule.
- 2.2 Step (v) specifies that later adjoining programmes are identified which start after the end of the last programme in the schedule (the "first programme" in step (iv) initially also being the last programme in the schedule, see point 2.1 above). Alternatively earlier adjoining programmes are identified which finish before the start of the first programme in the schedule (the "first programme" in step (iv) initially also being the first programme in the personal channel schedule, see point 2.1 above).
- 2.3 Steps (vi) to (viii) *inter alia* specify that the second programme added to the personal channel schedule is an adjoining programme, i.e. a programme selected among the group of identified adjoining programmes (see step (v)). The selection is made using the results of scoring the adjoining programmes on the basis of the received user preference information (see steps (i), (vi) and (vii)). The board agrees with the decision under appeal that in the present case the scoring of

the adjoining programs implies a numerical valuation of a variable degree. Hence a schedule of two temporally succeeding scored programmes is built up wherein the first and the second programme do not have any temporal overlap in the personal channel schedule. This is confirmed by the word "channel" because a channel in the given context only offers one programme at any point in time.

2.4 According to step (ix) steps (v) to (vii) are repeated to build up the personal channel schedule. Hence a third programme is added to the personal channel schedule, which third programme starts after the end of the second programme. In the alternative the third programme finishes before the start of the first programme in the personal channel schedule. Thus the personal channel schedule built up in accordance with the method of claim 1 comprises at least three temporally succeeding programmes which do not have any temporal overlap in the personal channel schedule.

2.5 This meaning of the expression "building a personal channel schedule" is confirmed by the description of the opposed patent. According to paragraph [0006] of the patent specification "[a] personal channel is essentially a series of programmes from diverse sources intended to be shown in succession selected according to the viewer's preferences". Furthermore, the set-top box of an embodiment "automatically re-tunes to each broadcast channel as required, providing the effect of a single channel". Also figure 2 shows a personal channel schedule (90) consisting of a succession of programmes which do not overlap in the personal channel schedule (although they may have overlapping portions

in the individual schedules of the real channels; see figure 2: 93 and 94).

2.6 According to paragraph [0024] of the patent specification "[a] personal channel is a schedule of programmes which have been selected from programmes available from real channels or other programme sources (for example, Webcast programmes)". Hence if programmes on different real channels are broadcast with a temporal overlap, only one of the overlapping programmes may be built into the personal channel schedule for the time of overlap. "Programme overlaps can be handled either by manually choosing which programme takes priority, or by pre-programmed rules" (see paragraph [0028]). In an embodiment in which a set-top box includes means to receive more than one programme at once and when it includes motion video storage means, an overlapping programme may be built into the personal channel schedule with a time shift (see paragraph [0029]). Depending on the criteria applied for handling programmes which are broadcast on different real channels with a temporal overlap, it may also be possible to consider a part of a programme on a real channel as a programme for the purpose of building the personal channel (see the different meanings of references "C" or "D" in figure 2). But in any case a user consulting the personal channel schedule will be presented with only one programme for any point in time.

2.7 However, the personal channel schedule does not necessarily provide a seamless succession of programmes. This feature is specified in dependent claim 5. Gaps between programmes can occur, and may be filled by other programme material, but the "[o]ptions include

simply leaving a gap in the schedule" (see paragraph [0089]).

- 2.8 This meaning of the expression "building a personal channel schedule" is also consistent with the problem underlying the opposed patent. According to paragraph [0002] of the patent, consumers will be able to choose from many thousands of programmes or programme clips and thus will be faced with an overwhelming choice of viewing. According to paragraphs [0006] and [0007] automatic programme scheduling assists in choosing between sources of programming. A personal channel (essentially a series of programmes from diverse sources, intended to be shown in succession) is generated for the user. Multiple personal channels may be generated, each comprising a sequence of programmes from multiple programme sources, chosen according to the user's taste or specifications. Hence the emphasis is changed from a broadcast model to a personal channel model.

3. *Documents D10 and D11*

- 3.1 D10 is also concerned with the problem that the selection of broadcasts of individual interest has become a time-consuming task (see column 1, lines 27 to 51). It discloses a solution to this problem which has the advantage that the broadcast subscriber may within a very short time automatically obtain for a defined period in advance a detailed pre-selection based on his individual interests. He may thus make a purposeful final selection in advance (see column 2, lines 3 to 12). According to D10 a classification code is generated for each broadcast in a broadcasting

centre. The classification code, formal broadcast information and further information texts are combined into a broadcast-specific information item (see column 2, lines 26 to 50). The information items for a defined period are transmitted to the subscriber. A selector installed on the premises of the subscriber compares the broadcast-specific information items with the subscriber's interest profile (see column 2, line 58 to column 4, line 13) and preselects the information items which match the subscriber's interest profile. The subscriber himself may then more specifically select information items from the preselected information items. The resulting programme plan for the defined period may then be printed out, for instance (see column 4, lines 14 to 25).

3.2 Hence according to D10 a pre-selection of programmes is built which comprises only programmes matching the subscriber's interest profile. But the pre-selection is built to present, in general, a plurality of programmes for a predefined period of time, so that the user can make a final selection for any point in time within this predefined period (see column 2, lines 3 to 20). Thus D10 does not disclose a method of building a personal channel schedule consisting of a succession of adjoining programmes which are selected by scoring within the meaning of the opposed patent.

3.3 D11 is concerned with the problem that the multiplicity of television programmes causes the size of television magazines to increase excessively (see column 1, lines 46 to 51). It discloses a solution to this problem which has the advantage that the broadcast subscriber may automatically obtain a programme preview

matched to an individual interest profile. The individual programme preview can be displayed on the picture screen of a television receiver, for example in the form of an alphanumerical listing, so that the subscriber is spared the trouble of looking through a programme magazine (see column 1, line 59 to column 2, line 6). According to D11 a programme summary comprising classification criteria for each television broadcast is comprised in the broadcast data stream (column 2, lines 57 to 67). If a receiver is switched on or in standby mode, a computer determines continuously and automatically whether the programme summary fed to it contains broadcasts which belong to an individual interest profile of a subscriber (see column 3, lines 6 to 16). Broadcasts matching the individual interest profile are then selected, and a corresponding individual programme preview is generated (see column 3, lines 17 to 33). Thus the subscriber may be informed about imminent broadcasts matching the individual interest profile (see column 4, lines 27 to 30).

- 3.4 Hence according to D11 a programme preview is built which comprises only programmes matching the subscriber's interest profile. But the programme preview is built to present in general, for any one point in time, a plurality of programmes to be broadcast. Thus D11 does not disclose a method of building a personal channel schedule consisting of a succession of adjoining programmes which are selected by scoring within the meaning of the opposed patent.

4. *First ground for opposition: lack of novelty*
(Articles 100(a) and 54 EPC 1973)

4.1 If follows from section 3 above that neither D10 nor D11 disclose a method as specified in claim 1, not even a method in accordance with the statement indicating the designation of the subject-matter of the invention as set out in claim 1.

4.2 It is undisputed that neither D12 nor D13 discloses a method of building a personal channel schedule.

4.3 Thus the method specified in claim 1 does not form part of the available state of the art. Hence the ground for opposition of lack of novelty, invoked by the opponent, does not prejudice the maintenance of the patent.

5. *Second ground for opposition: lack of inventive step*
(Articles 100(a) and 56 EPC 1973)

5.1 As set out in point 2.8 above, the claimed method of building a personal channel schedule relates to the problem of assisting in choosing between sources of programming. The assistance for the user is in the form of a personal channel schedule, i.e. a series or sequence of programmes, potentially from diverse sources, intended to be shown in succession (see paragraphs [0006] and [0007]). A plurality of personal channel schedules may also be generated (see claim 4). A user having chosen a personal channel no longer needs to make any selection: as long as he maintains the personal channel, he will be presented with a succession of programmes meeting his taste or

specifications. Claim 1 specifies the method of building the personal channel schedule.

- 5.2 Documents D10 and D11 are also related to the problem of assisting in choosing between sources of programming. However, both according to D10 and D11 the assistance for the user takes a different form. In particular, it is in the form of a pre-selection of programmes, potentially from different sources, which are intended to be broadcast over a predefined period of time. The user presented with this pre-selection in general still needs to make a final selection for any given point in time. It is possible that the pre-selection consists of a sequence of programmes which all originate from the same source or are all broadcast on the same real channel, but this would be the result of chance and/or a particular interest profile, and not the result of identifying adjoining programmes which are selected for presentation to the user by scoring performed according to the claimed method.
- 5.3 With regard to the documents of the state of the art adduced in appeal proceedings, a person skilled in the art familiar with documents D10 and/or D11 would have been faced with the objective problem of providing a different form of assistance for the user. However, since none of the documents discloses a method of building a personal channel schedule within the meaning of the opposed patent, it would not have been obvious for a person skilled in the art to solve the above problem by taking the steps specified in claim 1 to build a personal channel schedule.

5.4 In this context the appellant argued that the user would have used the possibilities disclosed in D10 or D11 in such a manner that a succession of programmes would have resulted and thereby would have established a personal channel schedule within the meaning of the opposed patent. However, a user presented with a programme pre-selection according to D10 or D11 would select one or more of the preselected programmes, possibly a succession of programmes, according to personal taste. This user activity of finally selecting a succession of programmes matching the user's interest is not a method of building a personal channel schedule as specified in claim 1. For instance, claim 1 specifies in step (i) that user preference information characterising a user's preferred programmes is received and this information is used in step (vi). In the context of claim 1, this requires technical steps of processing the received user preference information data (which are input by or for the user) and the received programme descriptor information data so as to enable a scoring and a time-based selection of adjoining programmes. According to each of D10 and D11 the user preference information is received by a computer (as would normally also be the case in the opposed patent, see claims 6 and 7) and the user, during an editing process, would have to build his own succession of programmes.

5.5 Furthermore, a combined procedure of first a computer preselecting programmes as disclosed in D10 or D11 and second the user finally selecting programmes from the pre-selection cannot be equated to a method of building a personal channel schedule as specified in claim 1. As already said above, the user would finally select a

programme and possibly add it to a succession of programmes he or she intends to watch one after the other. This final selection would be made according to personal taste. In doing so the user would have to take into consideration any time gaps and overlaps. Claim 1 however specifies that the broadcast programmes are scored based on the received user preference information using the programme descriptor information and that the results of the scoring are used to select from the adjoining programmes a programme which is then added to the personal channel schedule.

5.6 D12 discloses a method of recording television broadcasts. The broadcasts to be recorded are selected by the user. The user is warned if there is a temporal overlap of selected broadcasts, and may then prioritise the broadcast to be recorded.

D13 also discloses a method of recording television broadcasts. The broadcasts to be recorded are selected by the user. The user allocates a priority number to each selected broadcast. If there is a temporal overlap of selected broadcasts, the broadcast having the higher priority number is recorded.

Hence neither D12 nor D13 suggests building a personal channel schedule by taking the steps specified in claim 1.

5.7 Thus, having regard to the state of the art documents adduced in appeal proceedings, the method specified in claim 1 was not obvious to a person skilled in the art.

6. The findings in point 4.3 and 5.7 apply also to the subject-matter of independent claims 6 and 7 for the reasons given for claim 1, because this computer program, when running, performs the same method steps. Moreover, they also apply to the subject-matter of claims 2 to 5, because these claims are dependent on claim 1. Hence the ground for opposition of lack of inventive step, invoked by the opponent, does not prejudice the maintenance of the patent.

7. In view of the above, the appellant's request that the decision under appeal be set aside has to be refused. Hence there is no need to consider the respondent's auxiliary requests.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

L. Fernández Gómez

F. Edlinger