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**Datasheet for the decision
of 21 October 2019**

Case Number: T 0815/15 - 3.4.02

Application Number: 03781849.9

Publication Number: 1576340

IPC: G01D5/34, G11B27/10, G06F17/30,
G11B27/00

Language of the proceedings: EN

Title of invention:

SYSTEM FOR SYNCHRONIZING VINYL RECORD ALBUM WITH EXTERNAL
SOURCE

Applicant:

Spencer, Charles A.

Headword:

Relevant legal provisions:

EPC Art. 123(2)
RPBA Art. 13(1)

Keyword:

Amendments - allowable (no)
Late-filed auxiliary request - admitted (no)

Decisions cited:

Catchword:



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Chambres de recours

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Case Number: T 0815/15 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 21 October 2019

Appellant: Spencer, Charles A.
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Representative: Round, Edward Mark
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 19 November
2014 refusing European patent application No.
03781849.9 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman R. Bekkering
Members: H. von Gronau
T. Karamanli

Summary of Facts and Submissions

I. The appeal of the applicant is directed against the decision of the examining division to refuse the European patent application No. 03781849.9. The examining division refused the application on the ground that claims 1 and 12 of the then main request were amended to contain subject-matter that extended beyond the content of the application as filed (Article 123(2) EPC) and were not clear (Article 84 EPC). With respect to the then auxiliary request 1, the division was also of the opinion that the subject-matter of claim 1 extended beyond the content of the application as filed (Article 123(2) EPC) and was not clear (Article 84 EPC). The auxiliary request 2 was not admitted into the proceedings under Article 137(3) EPC because its claim 1 was *prima facie* not clear.

II. The appellant requested with the grounds of appeal that the contested decision be set aside and that a patent be granted on the basis of the claims according to the main request or the first auxiliary request. The claims of both requests were filed with the grounds of appeal. Claims 1-16 of the main request corresponded to those of the first auxiliary request, which had been filed in the oral proceedings before the examining division and were the subject of the contested decision.

As an auxiliary measure oral proceedings were requested.

III. In a communication under Article 15(1) RPBA annexed to the summons to oral proceedings the board expressed its provisional opinion, that *inter alia* the subject-matter of claim 1 of the main request and of the first auxiliary request extended beyond the content of the

application as filed, and that claim 1 of the first auxiliary request was not clear.

- IV. By a letter dated 20 September 2019 the appellant filed amended claims according to a second auxiliary request and argued that these amendments had been made with the intention of addressing the specific objections raised by the board.
- V. Oral proceedings took place on 21 October 2019. After a discussion on the main request and the first auxiliary request the chairman informed the appellant of the board's view that the subject-matter of claim 1 of these requests did not meet the requirements of Article 123(2) EPC. The chairman informed the appellant that the objection under Article 123(2) EPC, which had been discussed with respect to the main request, had been addressed in claim 1 of the second auxiliary request and, since this objection had been raised for the first time in the board's communication under Article 15(1) RPBA, the board admitted the second auxiliary request into the proceedings. The chairman also informed the appellant that with respect to the second auxiliary request it appeared that the requirements of Article 123(2) EPC were not met because the added feature that the position signals indicate the distance the stylus has travelled "in the groove" in claim 1 seemed to have no basis in the application as filed. The chairman added that there appeared to be several clarity problems with respect to claim 1 and summarised the board's objections with respect to clarity.

In the course of the oral proceedings the appellant filed claims according to a third auxiliary request. The third auxiliary request was not admitted into the proceedings.

The appellant confirmed his final requests as follows:

The appellant requested that the decision under appeal be set aside and that a European patent be granted on the basis of the claims of the main request filed with the statement of grounds of appeal, or, as an auxiliary measure, of the first auxiliary request filed with the statement of grounds of appeal, the second auxiliary request filed by letter dated 20 September 2019 or the third auxiliary request filed at the oral proceedings of 21 October 2019.

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

VI. Claim 1 according to the main request as filed with the grounds of appeal reads as follows:

"An apparatus for synchronizing a digital signal output from an external digital source with an analogue electrical signal for driving a loudspeaker, the apparatus comprising:

 a stylus (123) for sensing a topography on a surface;

 an analog signal source for generating an analog electrical signal representative of the topography sensed by the stylus (123);

 a signal processing unit for receiving signals indicating the distance the stylus has travelled on the surface from a rest position, the signal processing unit being configured to generate a waveform map by sampling the analog electrical signal and correlating portions of the sampled analog signal with the received signals indicating the distance the stylus has travelled on the surface,

the signal processing unit being configured such that the rate at which the signal processing unit samples the analog signal varies based on the location of the stylus on the surface;

the signal processing unit being configured to generate a synchronization map by matching at least two synchronization points on the waveform map with portions of a waveform of the digital signal, the synchronization map containing information describing the location of the synchronization points with respect to the distance travelled by the stylus from the rest position;

the apparatus being configured to use the synchronization map to output the digital signal based on the position of the stylus on the surface."

Claim 1 according to the first auxiliary request as filed with the grounds of appeal reads as follows:

"An apparatus for synchronizing a digital signal output from an external digital source with an analogue electrical signal for driving a loudspeaker, the apparatus comprising:

a stylus (123) for sensing a topography on a surface;

an analog signal source for generating an analog electrical signal representative of the topography sensed by the stylus (123);

a scanner for generating a label signal each time a label arranged on the surface is arranged operably proximate the scanner;

a signal processing unit for receiving signals indicating the distance the stylus has travelled on the surface from a rest position, the signal processing unit being configured to generate a waveform map by sampling the analog electrical signal and correlating

portions of the sampled analog signal with the received signals indicating the distance the stylus has travelled on the surface, the signal processing unit being configured such that the rate at which the signal processing unit samples the analog signal varies based on the location of the stylus on the surface;

the signal processing unit being configured to mark on the waveform map label points, the location of the label points corresponding to the distance the stylus has travelled upon communication of each label signal from the scanner;

the signal processing unit being configured to generate a synchronization map by matching at least two synchronization points on the waveform map with portions of a waveform of the digital signal, the synchronization map containing information describing the location of the label points and synchronization points with respect to the distance travelled by the stylus from the rest position;

the apparatus being configured to use the synchronization map to output the digital signal based on the position of the stylus on the surface."

Claim 1 according to the second auxiliary request as filed with letter dated 20 September 2019 reads as follows:

"An apparatus for synchronizing a digital signal output from an external digital source with an analogue electrical signal for driving a loudspeaker, the apparatus comprising:

a turntable having a surface for supporting and rotating an analog record,

a stylus (123) arranged to run within a spiraled groove of the analog record and to sense the topography of the groove;

an analog signal source for generating an analog electrical signal representative of the topography sensed by the stylus (123);

a scanner arranged to scan a label area of the record as the record rotates on the turntable, the scanner being configured to generate a label signal each time a label arranged in the label area is arranged operably proximate the scanner;

a position encoder for generating position signals indicating the distance the stylus has travelled in the groove from a rest position;

a signal processing unit for receiving the position signals, the signal processing unit being configured to generate a waveform map by sampling the analog electrical signal and correlating portions of the sampled analog signal with the received position signals, the signal processing unit being configured such that the rate at which the signal processing unit samples the analog signal increases as the stylus moves around the groove towards the center of the record;

the signal processing unit being configured to mark on the waveform map label points, the location of the label points corresponding to the distance the stylus has travelled upon communication of each label signal from the scanner;

the signal processing unit being configured to generate a synchronization map by matching at least two synchronization points on the waveform map with portions of a waveform of the digital signal, the synchronization points comprising portions of the analog waveform in the waveform map, the synchronization map containing information describing the location of the label points and synchronization points with respect to the distance travelled by the stylus from the rest position, and information

describing the portions of the waveform of the digital signal that are matched to each synchronization point; the apparatus being configured to use the synchronization map to output the digital signal based on the position of the stylus in the groove."

Claim 1 according to the third auxiliary request as filed during the oral proceedings before the board reads as follows:

"An apparatus for synchronizing a digital signal output from an external digital source with an analogue electrical signal for driving a loudspeaker, the apparatus comprising:

a controller unit comprising a turntable having a surface for supporting and rotating an analog record, the controller unit further comprising a tone arm assembly,

wherein the tone arm assembly includes a cartridge pivotally coupled to the controller unit via a tone arm and tone arm pin, the tone arm pin including a stylus (123) arranged to run within a spiraled groove of the analog record and to sense the topography of the groove;

the cartridge comprising an analog signal source for generating an analog electrical signal representative of the topography sensed by the stylus (123);

a scanner arranged to scan a label area of the record as the record rotates on the turntable, the scanner being configured to generate a label signal each time a label arranged in the label area is arranged operably proximate the scanner;

a tone arm encoder arranged on the controller unit within an operable proximity of the tone arm when the stylus is arranged within the groove of the record, the

tone arm encoder being configured to generate tone arm assembly signals indicating the position of the tone arm relative to the tone arm encoder for indicating the distance the stylus has travelled from a rest position;

a signal processing unit for receiving the tone arm assembly signals, the signal processing unit being configured to generate a waveform map by sampling the analog electrical signal and correlating portions of the sampled analog signal with the received tone arm assembly signals;

the signal processing unit being configured to match at least two portions of the waveform map with portions of a waveform of a digital signal,

the signal processing unit being configured to generate a synchronization map by marking on the waveform map label points, the location of the label points corresponding to the distance the stylus has travelled upon communication of each label signal from the scanner, and further by marking on the waveform map information describing the values of the tone arm assembly signals associated with the respective portions of the waveform map and information describing the respective portion of the waveform of the digital signal that is matched to each portion of the waveform map;

the apparatus being configured to use the synchronization map to output the digital signal based on the position of the stylus."

Reasons for the Decision

1. The appeal is admissible.

2. Main request - claim 1 - amendments (Article 123(2) EPC)
 - 2.1 The examining division argued in the decision under appeal that claim 1 of the then first auxiliary request (which corresponds to the present main request) did not define that the output of the digital signal was controlled according to label signals and the value of the tone arm assembly signals indicating the distance the stylus has travelled from its rest position, but only defined that the digital signal was output based on the position of the stylus on the surface and the corresponding synchronisation points. The omitting of the "label signals" was thus an unallowable intermediate generalization (see section B.I. of the contested decision).
 - 2.2 The board in its communication under Article 15(1) RPBA expressed furthermore the provisional view that the feature "position encoder for generating position data related to the location of the stylus on the surface" was missing in independent claim 1 of the main request.
 - 2.3 The appellant argued that the feature "label signals" was an optional, rather than essential, feature of the invention as could be understood from paragraphs [0078], [0048] and [0058] of the application as filed (see section "Article 123(2) EPC" on pages 1 and 2 of the grounds of appeal). Furthermore, the appellant argued at the oral proceedings before the board that the encoder was not an essential feature of the invention and that only the position data was important for the invention.
 - 2.4 The board is of the opinion that label signals are disclosed in the description as an essential feature of

the synchronization map. The relevant disclosure starts in paragraph [0070], where it is said that label signals are generated during sampling of the analog audio record by scanners. Every time a label is detected by the scanner, a label signal is communicated to the data processing unit 200 and label points are thus marked on the waveform map. In paragraphs [0071] to [0077], it is described how a synchronization map is generated from the waveform map. Paragraph [0078] summarizes that a completed synchronization map contains information describing the location of the label points and the synchronization points with respect to a distance travelled by the stylus from its rest position. The remainder of the description does not disclose that the label points might be omitted from the synchronization map.

With respect to the position encoder, the board is not convinced by the argument of the appellant. Throughout the application as filed, it is disclosed that the distance the stylus has travelled on the surface from a rest position is determined by the tone arm encoder (see e.g. paragraphs [0034] to [0037], and [0064]). This implies that the distance is determined by angular movement of the tone arm. No other means are disclosed that could provide information about the distance travelled by the stylus from the rest position. Consequently, the position encoder is disclosed as being essential for determining the particular distance in the claimed invention. The omission of the disclosed position encoder therefore constitutes an inadmissible intermediate generalization.

2.5 The board comes to the conclusion that the subject-matter of claim 1 extends beyond the content of the

application as filed and, consequently, does not meet the requirements of Article 123(2) EPC.

3. First auxiliary request - claim 1 - amendments (Article 123(2) EPC).

3.1 The board notes that the omitted label points of the synchronization map have been introduced in claim 1 of the first auxiliary request, but the position encoder is still omitted from the claim, contrary to Article 123(2) EPC.

3.2 In the oral proceedings before the board, the appellant had no further comments with respect to the objection under Article 123(2) EPC against the omitted position encoder in claim 1.

3.3 For the same reasons in respect of the main request (point 2.4 above), the board comes to the conclusion that the subject-matter of claim 1 also extends beyond the content of the application as filed (Article 123(2) EPC).

4. Second auxiliary request - admission (Article 13(1) RPBA)

The amended claims of the second auxiliary request were filed in response to the communication of the board under Article 15(1) RPBA and are therefore an amendment to the appellant's case within the meaning of Article 13(1) RPBA. The objection under Article 123(2) EPC, which the board had raised with respect to the omission of the position encoder in claim 1 of the main request and the first auxiliary request, has been addressed in claim 1 of the second auxiliary request. Since this objection had been raised for the first time in the

board's communication under Article 15(1) RPBA, the board exercised its discretion under Article 13(1) RPBA and admitted the second auxiliary request into the proceedings.

5. Second auxiliary request - amendments (Article 123(2) EPC)

5.1 With respect to the feature "a position encoder for generating position signals indicating the distance the stylus has travelled in the groove from a rest position", the appellant had argued in his letter dated 20 September 2019 that the wording had a basis in e.g. paragraph [0064] of the application as filed, which explained how "in generating the waveform map, the data processor 200 samples the analog audio waveform communicated from the controller unit 100 (e.g. the analog waveform) and correlates portions of the sampled analog waveform with corresponding values of the tone arm assembly signals, indicating the distance the stylus has travelled from its rest position." Further basis was provided in e.g. paragraph [0078], which disclosed that "for a particular analog record, the output of digital waveforms in synchrony with an analog waveform may be controlled according to label signals and the value of the tone arm assembly signals indicating the distance the stylus has travelled from its rest position" (see letter dated 20 September 2019, page 2, third paragraph).

5.2 The board is of the opinion that the requirements of Article 123(2) EPC are not met because the added feature that the position signals indicate the distance the stylus has travelled "in the groove" in claim 1 has no basis in the application as filed. The position encoder generates position signals related to the

position of the tone arm relative to its rest position and it is nowhere disclosed in the application as filed that the distance the stylus has travelled is a distance the stylus has travelled in the groove. The rest position could be off the record and the distance the stylus has travelled from the rest position could correspond for example to the movement from the rest position to a predetermined location on the record (see application as filed, [0064]).

5.3 The board comes to the conclusion that the subject-matter of claim 1 does not meet the requirements of Article 123(2) EPC.

6. Third auxiliary request - admission (Article 13(1) RPBA)

6.1 In the oral proceedings before the board, the appellant filed amended claims 1 to 14 of a new third auxiliary request and explained which amendments had been made to claim 1 and where a basis for them could be found in the application as filed. He stated with respect to the amended penultimate feature of claim 1 that there was no verbatim disclosure of the amended feature in the application as filed but that this feature was clearly disclosed, for example, in paragraphs [0078], [0072] and [0073].

6.2 The board notes that the third auxiliary request, which is an amendment to the party's case within the meaning of Article 13(1) RPBA, has been filed at a very late stage of the appeal proceedings and the multiple amendments to claim 1 raise new complex issues with respect to added subject-matter (Article 123(2) EPC) and lack of clarity (Article 84 EPC 1973).

In particular, as the appellant conceded, there is no verbatim disclosure of the amended penultimate feature of claim 1, i.e. of the feature: "marking on the waveform map information describing the values of the tone arm assembly signals associated with the respective portions of the waveform map and information describing the respective portion of the waveform of the digital signal that is matched to each portion of the waveform map". Hence, in the absence of an explicit disclosure, it is not immediately obvious from the entire application as filed or the specified paragraphs in particular that the feature in the penultimate section is originally disclosed. Rather, for verifying an implicit basis for this feature, the whole disclosure of the application as filed would have had to be examined. Thus, this is an issue which the board could not reasonably be expected to deal with at the oral proceedings (Article 13(3) RPBA).

Apart from this, it is originally disclosed that portions of the sampled analog signal or waveform are correlated with tone arm assembly signals (see e.g. paragraph [0064]), but it appears not to be disclosed that the tone arm assembly signals are associated with the respective portions of the "waveform map". Further, it is not clear how at least two portions of the "waveform map" may be matched with portions of a waveform of a digital signal, and how the tone arm pin includes the stylus. Thus, amended claim 1 raises several new complex issues with respect to added subject-matter and clarity.

6.3 For the above reasons the board exercised its discretion under Article 13(1) RPBA and did not admit the third auxiliary request into the appeal

proceedings.

7. Since none of the appellant's requests is allowable, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. Kiehl

R. Bekkering

Decision electronically authenticated