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Datasheet for the decision
of 27 October 2017

Case Number: T 1008/13 - 3.5.03
Application Number: 06763553.2
Publication Number: 1958360
IPC: H04H1/00
Language of the proceedings: EN

Title of invention:
RDS RADIO UNIT

Applicant:
Sony Mobile Communications AB

Relevant legal provisions:
EPC Art. 84

Keyword:
Claims - clarity (no)
Case Number: T 1008/13 - 3.5.03

DECISION
of Technical Board of Appeal 3.5.03
of 27 October 2017

Appellant: Sony Mobile Communications AB
(Applicant)
Nya Vattentornet
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Representative: Neij & Lindberg AB
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 13 December 2012 refusing European patent application No. 06763553.2 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: F. van der Voort
Members: B. Noll
O. Loizou
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 06763553.2 (publication No. WO 2007/062881 A1).

II. With the statement of grounds of appeal, the appellant filed a set of claims of an auxiliary request, and requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims on which the impugned decision was based (main request) or, in the alternative, on the basis of the claims of the auxiliary request. Oral proceedings were conditionally requested.

III. In a communication accompanying a summons to oral proceedings, the board expressed its preliminary opinion that, inter alia, the RDS radio unit according to claim 1 of each request was in contradiction to the embodiment described in the description with reference to Fig. 1, resulting in an ambiguity. Claim 1 therefore did not comply with Article 84 EPC, due to lack of support and lack of clarity (point 4 of the communication).

IV. With a letter dated 21 September 2017, the appellant filed a replacement description, amended inter alia in that it now stated that "Figure 1 is a flow diagram of an alternative embodiment not forming part of but usable for understanding the procedure of the invention" (underlining by the board). The appellant also addressed the board's objections under Article 84 EPC.
V. With a further letter dated 5 October 2017, the appellant informed the board that it would not be attending the oral proceedings.

VI. Oral proceedings were held on 27 October 2017 in the absence of the appellant.

On the basis of the written submissions, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims on which the impugned decision was based (main request) or, in the alternative, on the basis of the claims of a first auxiliary request as filed with the statement of grounds of appeal.

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

VII. Claim 1 of the main request reads as follows:

"An RDS radio unit comprising:

a radio tuner tunable to radio frequencies;

a control unit capable of controlling the radio tuner and monitoring received signal strength on a frequency to which the radio tuner is tuned, storage means for receiving and storing a list of alternative frequencies;

timer means capable of timing a number of operations;

wherein the control unit is adapted to perform a search for a better channel frequency than an original frequency with a program matching the original
frequency only when a first time T1 has elapsed, since the occurrence of an alternative frequency update request or a detection of a received signal strength below a predetermined threshold; the control unit is further adapted to perform the search during a second time T2 by tuning the radio tuner through frequencies on the list, and if a matching program is found, the radio tuner stays on the found channel frequency, but if T2 runs out before any matching program is found, or if the end of the AF list has been reached, the search through the list is discontinued, and wherein the control unit further comprises a counter arranged to count and indicate the number of discontinued searches for alternative frequencies and to be used to determine when to restart the search."

Claim 1 of the auxiliary request differs from claim 1 of the main request essentially in that it comprises the following additional features:

"wherein the control unit is adapted to perform next [sic] search for a better channel frequency only when a third time T3 has elapsed, if a search for a better channel frequency has failed once, that is, the counter is set to one; and wherein the control unit is adapted to perform next [sic] search for a better channel frequency only when a fourth time T4 has elapsed, if a search for a better channel frequency has failed more than once, that is, the counter is set to more than one."

**Reasons for the Decision**

1. *The application*
The application relates to the reception of a radio broadcast programme using RDS (radio data system) information. RDS information transmitted together with a radio broadcast programme in a radio includes an AF (alternative frequency) list which specifies additional radio channel frequencies at which the same programme may alternatively be received. If the reception of the radio channel to which a receiving radio unit is tuned becomes poor, the radio unit may retune to one of the frequencies specified in the AF list, thereby attempting to receive the programme in better quality. A common reason for deterioration in the reception of a radio broadcast in the case of a car radio is that the car is leaving the area serviced by a radio broadcast station. In this case, it is desirable that the car radio retunes to a frequency at which the same programme is broadcast in the area it is now entering. However, there may also be other reasons for the poor reception, e.g. because the car is moving through a mountainous area and the level of the received radio broadcast signal is fluctuating rapidly. In this case, retuning the receiving radio unit to another frequency would not normally overcome the poor reception.

2. Claim 1 of the main request - clarity (Article 84 EPC)

2.1 Claim 1 defines an RDS radio unit and specifies that

"the control unit is adapted to perform a search for a better channel frequency than an original frequency with a program matching the original frequency"

and that

"the control unit is further adapted to perform the search during a second time T2 by tuning the radio
tuner through frequencies on the list, and if a matching program is found, the radio tuner stays on the found channel frequency".

The latter feature implies that the first one channel at which a "matching" programme is found is the channel having a "better channel frequency". However, this understanding is at odds with the understanding of the first feature stating that the search performed is "for a better channel frequency". This wording implies that the quality of reception of the programme at channel frequency is considered in the search. Furthermore, claim 1 does not further specify the meaning of a "matching program". In the ordinary meaning of the term, programmes may be considered as "matching" in various aspects, i.e. if they broadcast content of the same category (news, classical music, etc.) or merely in the same language. Therefore, it is not clear what exactly the search is looking for: a better frequency channel (i.e. a channel which is received at a better quality than the previous channel) and/or a channel broadcasting an otherwise unspecified "matching program". Since it is not clear what exactly the search is looking for, it is not clear either when a search is to be regarded as being "discontinued". Claim 1 does not therefore clearly define the matter for which protection is sought.

2.2 The board notes that in order to comply with Article 84 EPC, a claim must be clear in itself, i.e. a skilled reader must be able to understand the claim without a need to refer to the description, since the claims, rather than a combination of the claims and the description, shall define the matter for which protection is sought, cf. Article 84 EPC.
The board further notes that, in the present case, even if, for the sake of argument, the replacement description were to be taken into account, this would not contribute to a better understanding of the matter for which protection is sought, contrary to what the amended wording "Figure 1 is a flow diagram of an alternative embodiment not forming part of but usable for understanding the procedure of the invention" (cf. point IV above; underlining by the board) in the replacement description appears to suggest.

More specifically, it is noted that in the description relating to Fig. 1 it is stated (see page 6, lines 13 to 18, of the description filed with the letter dated 21 September 2017):

"First the next AF frequency from the list is examined. If this frequency is not equal to freq1, the radio tuner is set to this frequency. Then the received signal strength RSSI is compared with RSSI1. If RSSI > RSSI1, this frequency is a candidate. Then a second timer T2 is set. While the timer T2 is running a search is made to find a PI [program identification] = PI1. The PI of the program transmitted on this frequency is compared with PI1"

and further in lines 23 to 25:

"If PI not equals PI1, the next AF frequency is examined. If there are no more AF frequencies or the time period T2 has elapsed, the AF search has failed, and nbrAFFailure is incremented by 1."

The skilled person would understand these passages to mean that the radio channels associated with the frequencies in the AF list are tested successively, to
determine whether the signal level of the channel at the AF frequency is higher than the signal level of the channel at which the programme was received before starting the search. The skilled person would further understand that the received RDS signal is tested to establish whether it carries the PI code of the programme previously received, and that the counter nbrAprFailure is incremented each time T2 lapses, i.e. that no PI code was received within the time T2, or that the end of the AF list has been reached, i.e. that all frequencies of the AF list have been tested and found to be unsuitable.

The embodiment described in relation to Fig. 1 is thus substantially in contradiction to the RDS radio unit as claimed. Consequently, it cannot serve to better understand claim 1 or to give the wording of the claim a more specific, clear meaning.

2.3 For the above reasons, claim 1 of the main request does not comply with Article 84 EPC.

3. **Claim 1 of the auxiliary request - clarity** (Article 84 EPC)

Claim 1 of the auxiliary request includes the same wording objected to in point 2.1 above. It therefore lacks clarity (Article 84 EPC) for the same reasons as claim 1 of the main request.

4. **Conclusion**

As there is no allowable request, it follows that the appeal is to be dismissed.

**Order**
For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  
The Chairman:

G. Rauh  
F. van der Voort

Decision electronically authenticated