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Datasheet for the decision of 4 June 2019

Case Number: T 2050/15 - 3.5.03

Application Number: 11738935.3

Publication Number: 2599335

IPC: H04R25/00, A61N1/36

Language of the proceedings: EN

Title of invention:
METHODS AND SYSTEMS FOR FITTING A BILATERAL COCHLEAR IMPLANT USING A SINGLE SOUND PROCESSOR

Applicant:
Advanced Bionics AG

Headword:
Fitting of cochlear implants/ADVANCED BIONICS

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (yes)

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Case Number: T 2050/15 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 4 June 2019

Appellant: (Applicant)	Advanced Bionics AG Laubisrütistrasse 28 8712 Stäfa (CH)
Representative:	Schwan Schorer & Partner mbB Patentanwälte Bauerstrasse 22 80796 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 8 April 2015 refusing European patent application No. 11738935.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	F. van der Voort
Members:	K. Schenkel
	J. Geschwind

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 11738935.3, with publication number WO 2012/016009 A1.

II. The refusal was based on the grounds that claims 1 and 14 of a main request and claim 1 of an auxiliary request contained subject-matter which extended beyond the content of the application as filed (Article 123(2) EPC) and that the subject-matter of claims 1 and 14 of the main request did not involve an inventive step (Articles 52(1) and 56 EPC) starting out from either of the following prior art documents:

D2: WO 2010/076342 A2; and

D3: EP 0 941 014 A2.

These documents were cited in the international search report which additionally cited the following documents:

D1: US 2004/208330 A1;

D4: US 2007/135862 A1; and

D5: WO 2009/072040 A1.

III. In its statement of grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of a main request or, in the alternative, of a first or a second auxiliary request, all requests filed with the

statement of grounds of appeal. Oral proceedings were conditionally requested.

IV. Oral proceedings were held on 4 June 2019.

At the oral proceedings, the appellant filed a new main request.

The appellant requested that the decision under appeal be set aside and that the case be remitted to the department of first instance for further prosecution.

After due deliberation, the chairman announced the board's decision at the end of the oral proceedings.

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

"A method comprising:

selectively fitting, by a fitting subsystem (202, 502), using a first sound processor (104, 504, 704-1), a first cochlear implant (110, 702-1) and a second cochlear implant (110, 702-2) to a cochlear implant patient, wherein the first sound processor is associated with the first cochlear implant, wherein the first sound processor is used, by the fitting subsystem, to communicatively couple the fitting subsystem to the first cochlear implant in order to fit the first cochlear implant to the patient, and to communicatively couple the fitting subsystem to the second cochlear implant after a communicative decoupling of the fitting subsystem from the first cochlear implant in order to fit the second cochlear implant to the patient;

automatically segregating, by the fitting subsystem, fitting data generated during the fitting of

the first cochlear implant from fitting data generated during the fitting of the second cochlear implant; and

transmitting, by the fitting subsystem, the fitting data generated during the fitting of the second cochlear implant to a second sound processor (104, 504, 704-2) associated with the second cochlear implant after the fitting of the second cochlear implant to the cochlear implant patient is completed so to enable the second sound processor to operate in accordance with the fitting data generated during the fitting of the second cochlear implant, wherein the first sound processor is communicatively decoupled from the fitting subsystem and the second sound processor is communicatively coupled to the fitting subsystem;

and wherein the first sound processor and the first cochlear implant are part of a first cochlear system associated with a first ear of the patient and the second sound processor and the second cochlear implant are part of a second cochlear system associated with a second ear of the patient, thereby fitting the first and second sound processors to the patient, which includes adjusting one or more control parameters by which the first and second sound processors and the first and second cochlear implants operate."

VI. In view of the board's decision, it is not necessary to reproduce the claims of the auxiliary requests.

Reasons for the Decision

1. Background

A hearing aid of the cochlear type includes a sound processor, usually located externally to the patient's head, and a cochlear implant, which are communicatively coupled to each other. Hearing aids in general may be

fitted to a patient to adapt control parameters of their operation to the patient's particular needs.

2. Main request - claim 1 - Articles 84 and 123(2) EPC

The board is satisfied that claim 1 complies with the requirements of Article 84 EPC.

Furthermore, claim 1 is based on claim 1 as originally filed and paragraphs [0035], [0044], [0047], [0064] to [0068], [0077] and [0078] of the description. An additional feature ("external") in former claim 1, against which the examining division raised an objection under Article 123(2) EPC, is omitted in present claim 1.

Claim 1 of the main request therefore complies with Article 123(2) EPC.

3. Main request - claim 1 - inventive step

3.1 Claim 1 is essentially directed to a method of fitting, by means of a fitting subsystem, first and second cochlear implants of first and second cochlear systems, respectively, each system including a sound processor and a cochlear implant. The fitting subsystem, using the first sound processor, is first coupled to the first cochlear implant and then, after having been decoupled from the first cochlear implant, to the second cochlear implant. Fitting data generated during the fitting of the second cochlear implant is then transmitted by the fitting subsystem to the second sound processor.

3.2 D2, which is considered to represent the closest prior art, relates to a method of configuring or, in other

words, fitting hearing devices. It discloses a configuration system with a configuring unit 1 (Fig. 1) which is connected via a network 5 to a hearing system 10 which includes two hearing devices 11 and 12. The configuring unit 1 includes a computer 2 and a communication unit 3 (page 16, lines 9 to 20). In order to fit the hearing devices, data is transmitted from the configuration system to the hearing devices via the network 5 (page 16, line 21, to page 17, line 2).

In the impugned decision, the examining division regarded a processor in the computer 2 as corresponding to the first sound processor within the meaning of claim 1, arguing that the processor of the computer is suitable for sound processing.

However, claim 1 defines the first sound processor as part of a first cochlear system which is associated with a first ear of the patient. Hence, the first sound processor, being part of the first cochlear system, must also be usable during normal hearing aid operation, i.e. after the fitting process. This does not apply to the processor of the computer 2 used during the fitting process in D2. Hence, it cannot be regarded as corresponding to the first sound processor used in the method of claim 1.

The method of claim 1 thus differs from the method disclosed in D2 in that, *inter alia*, the two hearing devices are cochlear systems, each including a cochlear implant and a sound processor, and in that the first sound processor of the first cochlear system is used by the fitting subsystem to communicatively couple the fitting subsystem to the second cochlear implant of a second cochlear system.

A technical effect achieved by these features is that, when fitting cochlear implants, both cochlear implants can be fitted using only one sound processor.

Starting out from the method of D2, the technical problem underlying the method of claim 1 may therefore be seen in providing a more convenient fitting method in the case of cochlear implants.

In the method of D2, the hearing devices for the left and right ear are respectively coupled independently from each other to the configuration system. D2 does not suggest using a component, which is part of one of the hearing devices, during the fitting process of the other hearing device. Furthermore, if hearing devices of the cochlear type were used in the method of D2, each hearing device would include its own sound processor for providing the necessary signals to the associated cochlear implant during normal operation. Hence, it would not have been obvious to the skilled person to use the sound processor of one hearing device during the fitting of the cochlear implant of the other hearing device.

3.3 D3 discloses a binaural hearing aid system with two hearing devices communicatively coupled to each other in order to transmit control signals for simultaneously adapting both hearing devices (claim 1). The control signals correspond to changes made by the user by manipulating control elements of one hearing aid during normal operation, like a volume or hearing program setting (paragraphs [0013] and [0015]). The control signals are transmitted from the one hearing aid to the other in order to simultaneously change also the setting of the other hearing device accordingly (paragraphs [0013], [0015] and [0027]).

D3 does not disclose the adaptation of hearing aid settings by means of a fitting subsystem. Neither does it disclose changing the setting only in the hearing device which receives the control signal from the other hearing device.

For the sake of argument, in the following it will be assumed that transmitting control signals to a hearing device corresponds to fitting the hearing device. The method of claim 1 then differs from the method disclosed in D3 in that, *inter alia*, the two hearing devices are cochlear systems, each including a cochlear implant and a sound processor, that a fitting subsystem is used to provide the control signals, and that the control signals which are transmitted from the first hearing device to the second hearing device are independent from the signals for controlling the first hearing device.

For the reasons given in the last paragraph of point 3.2, the skilled person would not have used the sound processor of one hearing device to fit the cochlear implant of the other hearing device, if hearing devices of the cochlear type were used in the method of D3.

Furthermore, D3 states as advantages provided by the disclosed method that no separate remote control is necessary and that a control input at one hearing device is sufficient to control both hearing devices (paragraph [0011]). The amendments necessary to arrive at the method of present claim 1 would have nullified these advantages.

3.4 The board therefore concludes that the skilled person, when starting out from the method of D2 or D3 and

taking into account common general knowledge would not have arrived at a method including all the features of claim 1 without the exercise of inventive skill.

3.5 The remaining documents cited during the examination procedure are of less relevance:

D1 discloses a fitting method in which a fitting subsystem is coupled to an old hearing device and a new hearing device in order to transfer "the character" or, in other words, the settings from the old to the new hearing device (paragraphs [0036] and [0038]). D1 does not disclose cochlear systems. Nor does it disclose the feature that a cochlear implant or, generally speaking, a component of a hearing device associated with a first ear of the patient is fitted by coupling it to a fitting subsystem using a component of a second hearing device associated with the second ear of the patient.

D4 relates to a method of fitting a cochlear system. It does not disclose the case of fitting two cochlear systems.

D5 discloses a method of operating a binaural system with two hearing devices which exchange signals in order to control a beam former in each hearing device. It neither discloses cochlear systems nor a fitting subsystem.

3.6 The board therefore concludes that the subject-matter of claim 1 of the main request involves an inventive step (Articles 52(1) and 56 EPC).

4. Conclusion

The objections leading to the refusal of the application have been overcome by amendment. Consequently, the decision under appeal is to be set aside.

However, the board has neither examined the dependent claims nor considered whether the description needs adaptation. These matters are considered best dealt with by the examining division. In accordance with the appellant's request, the case is therefore remitted to the examining division for further prosecution (Article 111(1) EPC).

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 for further prosecution.

The Registrar: The Chairman:

M. Schalow F. van der Voort

Decision electronically authenticated