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**Datasheet for the decision
of 15 February 2024**

Case Number: T 0825/19 - 3.4.01

Application Number: 10752992.7

Publication Number: 2408519

IPC: A61N1/36, H04L27/12, H04R25/00

Language of the proceedings: EN

Title of invention:
TRANSCUTANEOUS MODULATED POWER LINK FOR A MEDICAL IMPLANT

Patent Proprietor:
Cochlear Limited

Opponent:
Brulie B.V.

Headword:
Modulated Power link for a medical implant / Cochlear Limited

Relevant legal provisions:
EPC Art. 100(a), 53(c)

Keyword:
Patentable invention (No)
Exceptions to patentability - method for treatment by therapy

Decisions cited:

T 0789/96, T 1021/98



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Case Number: T 0825/19 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 15 February 2024

Appellant: Brulie B.V.
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 30 January 2019
rejecting the opposition filed against European
patent No. 2408519 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman P. Scriven
Members: P. Fontenay
C. Almberg

Summary of Facts and Submissions

- I. An opposition was filed on grounds under Article 100(a) EPC (exclusion from patentability - Article 53(c) EPC; lack of novelty - Article 54 EPC; lack of an inventive step - Article 56 EPC); and Article 100(c) EPC (added subject-matter).
- II. The opponent appealed the Opposition Division's decision to reject the opposition.
- III. In their decision, the Opposition Division held that none of the grounds raised by the opponent prejudiced the maintenance of the patent as granted. The merits of auxiliary requests 1 to 5 were not addressed.
- IV. Of relevance to the present decision is the Opposition Division's position regarding Article 53(c) EPC. Specifically, they recognised no functional link or physical causality between the steps defined in the claim and a therapeutic effect on the body.
- V. In the statement of grounds of appeal, the opponent requested that the Opposition Division's decision be set aside and that the patent be revoked. Some of the arguments put forward before the Opposition Division regarding novelty and inventive step were reiterated and developed. The opponent further developed the view that the subject-matter of the patent as granted

defined subject-matter excluded from patentability under Article 53(c) EPC.

VI. In their reply to the appeal, the proprietor requested, as a main request, that the appeal be dismissed, i.e. that the patent be maintained as granted. In the alternative, they requested remittal to the opposition division, if the appeal was not dismissed, or maintenance of the patent on the basis of one of auxiliary requests 1 to 5 (filed prior to oral proceedings before the Opposition Division).

VII. Claim 1 of the patent (main request) reads :

A method of providing a control signal for application to a mechanical actuator (23) of an implantable hearing device (100), the method comprising:
receiving an audio signal (301);
converting the audio signal (302) into an electrical signal;
modulating the electrical signal (303) using pulse modulation to provide a pulse modulated signal;
modulating the pulse modulated signal (304) using a digital modulation to provide a transmission signal for transmitting to an internal module (20) of the implanted hearing device (100);
receiving the transmission signal (401);
digitally demodulating the received transmission signal (402) to remove the digital modulation; and

applying the demodulated signal (403) to an input of an amplifier (26) to provide the control signal for application to the mechanical actuator (23).

- VIII. Claim 6 of the patent defines an internal module for a hearing implant system; and claim 10 is directed to a Direct Acoustic Cochlear Stimulation system.
- IX. The claims for auxiliary request 1 define a method and an internal module as in claims 1 and 10 of the patent, but limited to a Transcutaneous Bone Anchored Hearing Aid (T-BAHA) system.
- X. The claims for auxiliary request 2 are those of the patent, except that the method and the internal module are defined as comprising a class D amplifier, as in claims 4 and 8 of the patent.
- XI. The claims for auxiliary request 3 are those of the patent, except that the method and the internal module are defined as extracting a power component from the received transmission signal, as in claims 5 and 9 of the patent.
- XII. The claims for auxiliary request 4 are those of the patent, except that, in the method, in the internal module, and in the system the pulse modulation is at least one of pulse width and pulse density modulation; and the digital modulation is at least one of frequency shift keying, continuous phase frequency shift keying,

phase shift keying and on-off keying (as in claims 2 and 11 of the patent).

- XIII. The claims for auxiliary request 5 are those of auxiliary request 4 but limited to pulse width modulation and frequency shift keying.
- XIV. In a communication under Article 15(1) RPBA 2020, annexed to a summons to attend oral proceedings, the appellant was informed of the Board's preliminary opinion.
- XV. The Board, *inter alia*, disagreed with the Opposition Division regarding the ground of opposition under Article 100(a) in combination with Article 53(c) EPC. Rather, the claimed method appeared to be directed to alleviating, removing, or lessening the symptoms of a disorder or malfunction of the human body. The Board, therefore, considered claim 1 to define subject-matter excluded from patentability under Article 53(c) EPC.
- XVI. The passages of the Board's communication that are relevant to this decision read:

Method of treatment (Articles 100(a), 53 EPC)

2. Claim 1 concerns a method of providing a control signal for application to a mechanical actuator of an implantable hearing device. It comprises the final step

of providing the control signal for application to the mechanical actuator.

3. *The method of claim 1 is thus directed at alleviating, removing or lessening the symptoms of a disorder or malfunction of the human body. This is confirmed by the passage of the description page 1, lines 30-34, of the application as published. The claimed invention aims at assisting users suffering from a loss of hearing due to a malfunctioning middle ear. The actuator is intended to act directly on a part of the inner ear (e.g. the stapes) or directly onto the oval window of the cochlea (page 2, lines 1-6).*

4. *Contrary to the view expressed by the Opposition Division, the Board considers that the claimed method implies some interaction between the mechanical actuator and the body of the carrier. A different finding would deprive the claimed method of its purpose, that is, to assist users who suffer from a loss of hearing. It would also directly affect the analysis of inventive step in that it would deprive the claimed subject-matter of any clearly identifiable technical effect.*

5. *As observed by the opponent, as long as the claimed subject-matter incorporates one step of a therapeutic nature, it falls under the exclusion from patentability of Article 53(c) EPC. The actuation of the mechanical actuator directly affects the*

human body, in order to improve or restore hearing.

6. *Reference was made so far to decision T 789/96. The Board sees more parallels between the present case and the case underlying decision T 1021/98 (see section 2). The parties' attention is drawn more particularly to point 2.5 in this decision and its analysis of former decision T 789/96. Against this background, the essential point to be addressed is whether the claimed method provides an effect on the body and whether the effect qualifies as a therapeutic one.*

7. *Contrary to the Opposition Division, the Board sees a direct functional link between the claimed combination of features and the effect produced on the body by the mechanical actuator. The Board further considers this effect as qualifying as a therapeutic effect, since it is directly aimed at improving the hearing of users suffering from a malfunctioning middle ear.*

8. *Consequently, the Board is minded to view the claimed subject-matter as exempted from patentability.*

...

Auxiliary requests 1 to 5

36. *Auxiliary requests 1 to 5 were filed in the course of the opposition*

proceedings. The Opposition Division decided to maintain the patent as granted and decided neither on their admission nor on their merits.

37. The comments made above under section "Method of treatment" apply mutatis mutandis to the corresponding method claims

XVII. In response to the summons to attend oral proceedings, the patentee informed the Board that they intended neither to be present nor to be represented at the oral proceedings.

XVIII. The opponent requested oral proceedings only if the Board did not intend to revoke the patent. This was not the case.

XIX. The oral proceedings were therefore cancelled.

Reasons for the Decision

1. The Board indicated, under points 2 to 8, 36, and 37 of its communication, why, in its opinion, the main request and auxiliary requests 1 to 5 comprised subject-matter excepted from patentability (Article 53(c) EPC).

2. The parties did not comment on the Board's preliminary opinion, although they had an opportunity to do so. In particular, the proprietor did not challenge the assessment regarding subject-matter excluded from patentability.
3. The Board sees no reason to depart from this preliminary view.
4. The main request and auxiliary requests 1 to 5 are, therefore, not allowable (Article 53(c) EPC).
5. In the absence of an allowable request, the decision of the Opposition Division to maintain the patent as granted must be set aside and the patent revoked.
6. Since the parties have been heard; the proprietor's request for oral proceedings has, in effect, been withdrawn; the condition attached to the opponent's request for oral proceedings is not triggered; and the time limit for replying to the appeal has expired, this decision is handed down in written procedure (Article 12(8) RPBA).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chair:



D. Meyfarth

P. Scriven

Decision electronically authenticated