

BESCHWERDEKAMMERN
DES EUROPÄISCHEN
PATENTAMTS

BOARDS OF APPEAL OF
THE EUROPEAN PATENT
OFFICE

CHAMBRES DE RECOURS
DE L'OFFICE EUROPEEN
DES BREVETS

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 9 January 1998

Case Number: T 0236/94 - 3.4.1

Application Number: 89900403.0

Publication Number: 0341297

IPC: A61N 1/365

Language of the proceedings: EN

Title of invention:

Sensing margin detectors for implantable electromedical devices

Applicant:

Pacesetter, Inc.

Opponent:

-

Headword:

-

Relevant legal provisions:

EPC Art. 84, 111(1)

Keyword:

"All essential features in independent claim (yes)"

"Remitted to first instance"

"Reimbursement of appeal fee (no)"

Decisions cited:

T 0300/89, T 0299/86

Catchword:

-



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0236/94 - 3.4.1

D E C I S I O N
of the Technical Board of Appeal 3.4.1
of 9 January 1998

Appellant:

Pacesetter, Inc
15900 Valley View Court
P.O. Box 9221
Sylmar
California 91392-9221 (US)

Representative:

Rees, David Christopher
Kilburn & Strode
30 John Street
London WC1N 2DD (GB)

Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 7 December 1993
refusing European patent application
No. 89 900 403.0 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: G. Davies
Members: H. J. Reich
G. Assi

Summary of Facts and Submissions

I. European patent application No. 89 900 403.0 (International publication No. WO 89/03705) having a priority date of 27 October 1987, was refused by a decision of the Examining Division dated 7 December 1993.

II. In a first communication dated 10 December 1992 the Examining Division cited documents:

D1: US-A-4 535 774, and

D2: DE-C-3 232 478

and took the view that the subject-matter of the original claim 1 lacked novelty with regard to document D1. In response to this communication, the applicant filed with letter dated 10 February 1993 a new set of claims 1 to 7 replacing original claims 1 to 21. In a second communication dated 19 March 1993 the Examining Division gave detailed reasons why claim 1 as filed with letter dated 10 February 1993 was obvious in view of the prior art cited in documents D1 and D2 and informed the applicant that the particular realisation of the "sensing margin ... determining means" as depicted in Figures 2 and 3, respectively, appeared to contain patentable subject-matter. In response to this second communication, the applicant with letter dated 10 June 1993 maintained claims 1 to 7 as filed with letter dated 10 February 1993 unamended and requested "an interview" in the case of a continued negative opinion. Thereupon, the Examining Division refused the application with a decision dated 7 December 1993.

III. The reason given for the refusal was that the subject-matter of claim 1 as filed with the letter dated 10 February 1993 did not satisfy the requirements of Articles 52 and 56 EPC having regard to documents D1 and D2 for the following reasons: starting from the prior art circuitry disclosed in document D2, which had all the features set out in the preamble of claim 1, the technical problem consisted in determining the extent by which the input signal applied to one input of a comparator exceeded the threshold voltage supplied to the other input thereof. Providing the claimed means for determining a quantitative value for the sense margin - i.e. basically means for measuring the level of the signal applied to the input of the comparator - came within the realm of normal design work having regard to the disclosure in document D1, column 5, lines 23 to 29 and 61 to 63, and Figure 2, in particular the difference signal "delta" SV_M . According to the decision, rejecting the application, without having held the interview proposed by the applicant, appeared to be procedurally justified and in line with decision T 300/89, OJ EPO 1994, 480.

Furthermore, the Examining Division stated in its decision, page 5, second paragraph that it was evident from its communication dated 19 March 1993, that merely combining the subject-matter of claims 1 and 2 would not lead to an allowable independent claim.

IV. The applicant lodged an appeal against this decision, paid the fee and filed the grounds on 18 January 1994, maintaining claim 1 as filed with letter dated 10 February 1993 unamended as its main request, and filing an auxiliary request based on the combined subject-matter of claims 1 and 2. Furthermore, the applicant submitted an auxiliary request for oral proceedings.

V. In a communication dated 17 March 1997 the Board informed the appellant of its preliminary view as follows:

- (a) Claim 1 of the main request appeared to lack an inventive step in the sense of Article 56 EPC for the following reasons: starting from the device disclosed in document D2 comprising the features as defined in the pre-characterising part of claim 1, the objective problem would consist in providing a device allowing the detection of changes in the sensing properties of the device after implantation. Comparator 104 in Figure 2 of document D1 provides an output signal ΔSV_M which represents a quantitative value of the extent by which said processed signal SV_M exceeds sensing margin threshold level SV_R (see D1, column 5, lines 23 to 26). Hence, the essential technical means for the solution of the objective problem are known. In order to arrive at the solution as claimed in claim 1, a skilled person would only have to provide means for measuring ΔSV_M quantitatively. Such means are generally known.

- (b) In the present wording of claim 1 of the auxiliary request, it remains unclear how a "timer means" may indicate a quantitative value of the sensing margin. The processed signal resulting from the subject-matter of claim 1, is clearly not a value having the dimension of a time duration. The same applies to the threshold level. According to both disclosed embodiments, processed signal and reference level are voltages. Hence, claim 1 of the auxiliary request misses the essential feature of the invention indicating how a voltage

difference is transformed into a time duration as disclosed in the description, page 12, lines 6 to 20 and page 13, line 17 to page 14, line 2.

Furthermore, the Board proposed a wording of the characterising part of claim 1 which - in the Board's preliminary view - would meet the objection mentioned in paragraph V-(b) above.

VI. In response to this communication of the Board, the appellant filed with letter dated 17 September 1997 a revised set of claims 1 to 7 including an amended claim 1 based closely on the wording proposed by the Board as his main request. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the following documents:

Claims: 1 to 7 filed with letter dated
17 September 1997;

Description: pages 1 to 6 and 8 to 15 according to
WO 89/03705,
page 7 filed with letter dated
17 September 1997;

Drawings: Sheet 1/2 and 2/2 according to
WO 89/03705.

Claim 1 filed with letter dated 17 September 1997 reads as follows:

"1. An implantable electromedical device comprising: a signal processor (20,21) including a comparator (32,33), for developing a processed signal corresponding to a depolarization event of the heart and for producing an output signal (CMP) from said comparator (32,33) for a time interval related to the

time said processed signal exceeds a sensing margin reference threshold level (V_{ref}); a detector (38) responsive to the onset of said output signal (CMP) for detecting said event, characterized by sensing margin quantitative value determining means for determining a quantitative value of the extent by which said processed signal exceeds said threshold level (V_{REF}) having means (30) for gradually decreasing the peak voltage of the processed signal to the threshold level V_{REF} , wherein the time duration of said decrease is proportional to the sensing margin; or means (80) for gradually increasing a signal proportional to V_{REF} to the peak voltage of the processed signal, wherein the time duration of said increase is proportional to the sensing margin and including timer means (58,59), for measuring said time duration in such a way that the count of the timer means represents a quantitative value of the sensing margin."

Claims 2 to 7 are dependent on claim 1.

The appellant further requested oral proceedings in the event that the Board were not to find the application in a form suitable to proceed and remit the case to the first instance or to proceed as otherwise appropriate and intended to refuse the appeal.

VII. Furthermore, the appellant requested reimbursement of the appeal fee. In support of this request the appellant argued essentially as follows: it is recognised that in the applicant's letter dated 10 June 1993 the request was not conventionally worded, however it was entirely clear from the representative's request that every effort was being made to arrive at an allowable form of claim in oral proceedings, declaring explicitly (see page 3) that he "would be willing to introduce the features of claim 2 into claim 1". The appellant noted that the wording proposed by the Board

of Appeal was effectively a clarification of the proposal by the applicant to incorporate previous claim 2 into claim 1. Thus, the applicant had made a clear effort to deal with the Examiner's objections, in particular by amendment, coupled, effectively, with a request for the Examiner's guidance. Accordingly, it was believed that the issuing of a decision to refuse as the next step of the examination procedure constituted a substantive procedural violation.

Reasons for the Decision

1. The appeal is admissible.
2. *Claim 1 - Support by Description*
 - 2.1 The subjective problem disclosed in the description consists in indicating an implantable device with an output "which provides a measure of the extent by which the processed signal exceeds detector threshold level" (i.e. a measure of the sensing margin); see the description page 7, line 31 to page 8, line 1.
 - 2.2 In the Board's view, claim 1 filed with letter dated 17 September 1997, comprises all the "essential" technical features which are indispensable in order to solve the problem set out above by specifying that the "sensing margin quantitative value determining means" includes not only timer means (i.e. the subject-matter of claim 2 as filed with letter dated 10 February 1993 but also has:

"means (30 in Figure 2) for gradually **decreasing** the peak voltage of the processed signal to the threshold level V_{REF} , wherein the time duration of said decrease is proportional to the sensing margin, or means (80 in

Figure 3) for gradually **increasing** a signal proportional to V_{REF} to the peak voltage of the processed signal, wherein the time duration of said increase is proportional to the sensing margin."

In the Board's view a skilled person derives these features from Figures 2 and 3 of the present application in combination with the description page 12, lines 6 to 23 and page 13, line 15 to page 14, line 2.

- 2.3 Hence, the Board holds that claim 1 as filed with letter dated 17 September 1997 is now supported by the description in the sense of Article 84 EPC. Attention is drawn to the binding effect according to Article 111(2) EPC.

3. The feature, specifying to determine the sensing margin quantitatively by transforming a voltage difference into a time duration as set out in paragraph 2.2 above, was until now only disclosed in the description and drawings and not claimed in any of the claims beforehand, in particular not in any claim filed originally or in any claim filed during the procedure before the Examining Division. It is therefore likely that this feature was not included in the subject-matter underlying the Search Report in the present case. Also from the communications of the Examining Division and the decision under appeal no comment can be derived on the patentability of an independent claim comprising the above feature.

4. For the above reasons, the Board exercises its power under Article 111(1) EPC (second sentence, second possibility) to remit the case to the first instance for further prosecution of the examination on the basis of the claims filed with letter dated 17 September 1997.

5. *Reimbursement of appeal fee*

5.1 In its second communication dated 19 March 1993 the Examining Division informed the applicant that claim 1 was not allowable under Article 56 EPC (see point 1) and that the application documents appeared to contain patentable subject-matter concerning the particular realisations of the "sensing margin ... determining means" disclosed in Figures 2 and 3 respectively (see point 2). The Examination Division stated explicitly that "anything less than redrafting the independent claim so that it includes a **complete, detailed** specification of the said circuitry will not lead to an allowable claim". In reply to such statement, the applicant maintained claim 1 unamended and submitted in its letter dated 10 June 1993, page 3, paragraph 2, that it "would be willing to introduce the features of claim 2 into claim 1". It is evident that such a specification of the sensing margin ... determining means as comprising timer means, timer control means and a clock is not a complete and detailed characterization of the circuitry in Figures 2 and 3; see paragraph V-(b) and 2.2. for details. Contrary to the appellant's opinion in paragraph VII above, in the Board's view, the Examining Division could not derive from the applicant's second letter that the applicant was making a clear effort to deal with the Examiner's objections. If the applicant wished to minimise the risk of an immediate adverse decision and consequent necessity of an appeal, it was clearly appropriate for him to have filed an auxiliary request (such as was filed in this appeal) before the Examining Division. The Examining Division would then have been obliged to consider the allowability of the auxiliary request so filed, in the same way as the Board of Appeal has in this appeal; see also T 300/89, OJ EPO 1991, 480, paragraph 9.1.

- 5.2 The right of a party to have "oral proceedings" is dependent upon such party filing a request for such proceedings; see also T 299/86 OJ EPO 88, 88. Oral proceedings held pursuant to Article 116 EPC differ from an informal "interview" as proposed by the applicant in its second letter of 10 June 1993, page 3, paragraph 2, and must be specifically requested. The arrangement of an interview was within the discretion of the Examining Division. An exercise of such discretion adversely to an applicant, such as in the present case, cannot by its nature be a procedural violation. Having regard to the particular circumstances of the present case no criticism can properly be made of the Examiner in relation to his failing to arrange for an interview.
- 5.3 For the above reasons, in the Board's view the procedure before the Examining Division did not involve any procedural violation which could justify refund of the appeal fee.
6. Having regard to the remittal to the Examining Division for further examination, the appellant's auxiliary request for oral proceedings needs no consideration.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the Examining Division for further prosecution of the examination on the basis of claims 1 to 7 filed on 17 September 1997 (see also paragraph VI, 2.3 and 4 above).
3. The request for reimbursement of the appeal fee is rejected.

The Registrar:

The Chairman:

M. Beer

G. Davies