

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MANS BARSNE

Appeal No. 2002-0104
Application No. 09/254,605

ON BRIEF

Before KIMLIN, OWENS and PAWLIKOWSKI, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 11-23, all the claims remaining in the present application. Claim 11 is illustrative:

11. A medical electrode cable having a longitudinal axis, comprising:

an exterior, tubular insulating sheath;

a plurality of wires disposed side-by-side substantially parallel to said sheath and forming a wire set, said wire set extending helically around and along said longitudinal axis;

one of said plurality of wires in said wire set comprising a low-resistive conductor;

at least two of said plurality of wires in said wire set respectively comprising high-resistive conductors, each of said high-resistive conductors being comprised of a same high-resistivity material;

all wires in said plurality of wires having equal respective diameters; and

said low-resistive conductor comprising a wire having a core of a low-resistivity material encased in an exterior jacket comprised of said high-resistivity material.

The examiner relies upon the following references as

evidence of obviousness:

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|--------------------|-----------|---------------|
| Dahl et al. (Dahl) | 4,559,951 | Dec. 24, 1985 |
| Comte | 4,640,983 | Feb. 03, 1987 |

Appellant's claimed invention is directed to a medical electrode cable comprising a plurality of wires which form a wire set. The plurality of wires are disposed side-by-side and comprise a low-resistive conductor, such as silver, and at least two high-resistive conductors, e.g., a cobalt alloy. Also, the low-resistive conductor is encased in an exterior jacket of high-resistive material. The electrode cable is "mainly intended to serve as an electrical connection between an electrical stimulation device, such as a heart stimulator, defibrillator,

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etc., which can be connected to the proximal end of the cable, on the one hand, and an electrode connected to the distal end of the cable, on the other hand" (page 1 of specification, first paragraph).

Appealed claims 11-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Comte in view of Dahl.

Appellant submits at page 7 of the Brief that "[t]he patentability of dependent claims 12-23 is not argued separately from the patentability of independent claim 11" (penultimate paragraph). Accordingly, all the appealed claims stand or fall together with claim 11.

We have thoroughly reviewed each of appellant's arguments for patentability. We are, however, in complete agreement with the examiner's analysis and application of the applied prior art as well as his cogent disposition of the arguments raised by appellant. Accordingly, we will adopt the examiner's reasoning as our own in sustaining the rejection of record, and we add the following for emphasis only.

Comte, as explained by the examiner, discloses a medical electrode cable with the same utility as appellant's cable which comprises a plurality of wires, forming a wire set, which are disposed in a side-by-side relationship (conductors 11 of Comte

comprise wires 21 and 23 which form a wire set: see Figures 1 and 7). The wires 21 and 23 of Comte's wire set can consist of different materials, including a high-resistive cobalt alloy and a low-resistive silver (column 6, lines 7-9, lines 38-40 and lines 43-47). Consequently, Comte teaches a plurality of conductors (wires) disposed side-by-side wherein each of the conductors comprises low-resistive and high-resistive materials. As set forth by the examiner, this disclosure meets the requirement of claim 11 for "one of said plurality of wires in said wire set comprising a low-resistive conductor" and "at least two of said plurality of wires in said wire set respectively comprising high-resistive conductors" (emphasis added). This is so because the claim language "comprising" is open-ended and encompasses a plurality of wires wherein the wire comprising the low-resistive conductor also comprises a high-resistive conductor, and the wires comprising high-resistive conductors also comprise a low-resistive conductor (see the Examiner's Answer at pages 12 and 13).

Comte does not teach that a conductor comprising a low-resistive material is encased in an exterior jacket comprising a high-resistive material. However, as noted by the examiner, Dahl, directed to a medical electrode used with a cardiac

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pacemaker, teaches a plurality of wires comprising a low-resistive material (silver) encased in an exterior jacket of high-resistive material (a cobalt alloy). Dahl discloses that "[c]onductors fabricated in this fashion possess the property of unusually high flexibility, fatigue resistance and conductivity" (column 5, lines 58-60). Accordingly, based on the collective teachings of Comte and Dahl, we agree with the examiner's reasoning that it would have been obvious for one of ordinary skill in the art to construct the conductors of Comte, which comprise both high-resistive and low-resistive materials, in the manner disclosed by Dahl, i.e., a low-resistive material encased in a high-resistive material.

Appellant's arguments, for the most part, are not germane to the scope of protection sought by claim 11 on appeal. Appellant maintains that:

[E]ven if the Examiner considers the stranded wire bundles 11 in the Comte reference to correspond to the side-by-side wires of claim 11 of the present application, then of those side-by-side wires, one of those wires, according to claim 11, must comprise a low-resistive conductor, and at least two of those wires must comprise high-resistive conductors.

(Page 10 of Brief, second paragraph). However, appellant's argument is only meaningful if it is based upon an interpretation of claim 11 wherein the claimed wire comprising a low-resistive

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conductor consists only of a low-resistive material, and the two wires comprising high-resistive conductors consist only of high-resistive materials. As explained by the examiner and supra, however, the "comprising" language of appealed claim 11 does not allow for such a limited interpretation of the claim.

Appellant's argument regarding the Dahl reference is likewise not commensurate in scope with the breadth of claim 11. Appellant contends that although Dahl discloses jacketed conductors, "a person of ordinary skill in the art is taught by Dahl et al., at column 5, lines 46-49, that *each* of the conducting elements in the group of conductors can be fabricated with a jacket" (page 11 of Brief, last paragraph). Based on the Dahl disclosure, appellant maintains that "[w]ithout having had the benefit of first reading the present disclosure, a person of ordinary skill in the art would have no basis to 'single out' one and only one conductor in the stranded arrangement of Comte and construct that single conductor as a jacketed conductor" (id.).

The flaw in appellant's argument is that it presupposes that appealed claim 11 requires that only the low-resistive conductor comprises a low-resistive material encased in an exterior jacket comprising a high-resistive material. However, as pointed out by the examiner, there is no requirement in claim 11 which precludes

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the at least two wires comprising high-resistive conductors from also having a low-resistive material core encased in an exterior jacket comprising a high-resistive material. In other words, appealed claim 11 is sufficiently broad to embrace an electrode cable wherein the "one of said plurality of wires" and the "at least two of said plurality of wires" each comprises a core of low-resistive material encased in a jacket of high-resistive material. We observe that appellant has not addressed the examiner's interpretation of claim 11 on this record.

As a final point, we note that appellant bases no argument upon objective evidence of nonobviousness, such as unexpected results.

In conclusion, based on the foregoing and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

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| EDWARD C. KIMLIN |) | |
| Administrative Patent Judge |) | |
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| TERRY J. OWENS |) | BOARD OF PATENT |
| Administrative Patent Judge |) | APPEALS AND |
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