

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

Paper No. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JEFFREY R. PARKER,
JEFFREY B. WILLIAMS and
MARK D. MILLER

Appeal No. 2002-2340
Application 08/886,666

ON BRIEF

Before THOMAS, HAIRSTON, and KRASS, Administrative Patent Judges.
THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 77-85, 93-96, 98, 101, 108, 119, 131-133, 136 and 137.

Representative claim 77 is reproduced below:

77. A device for aiding a procedure comprising an instrument shaped to perform a specified function, and a light delivery system removably attached to said instrument

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for illuminating a viewing area adjacent said instrument, said light delivery system being shaped to conform to the general shape of said instrument, said light delivery system comprising light distribution means for receiving light from an associated light source and propagating light therethrough via internal reflection, and light emitter means extending lengthwise along said instrument, said light emitter means receiving light propagated by said light distribution means and emitting light along a portion of the length of said light emitter means for illuminating a viewing area in proximity of said instrument.

The following references are relied on by the examiner:

Wunsch et al. (Wunsch)	3,890,960	June 24, 1975
Mori	4,471,412	Sep. 11, 1984
Brody et al. (Brody)	4,597,030	June 24, 1986
Pristash et al. (Pristash)	5,136,480	Aug. 4, 1992

Claims 77 and 137 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Wunsch. The examiner's reliance upon this reference is extended to claims 95, 96, 98, 101, 133 and 136 with further reliance upon Mori in rejections under 35 U.S.C. § 103. As to claim 101, the examiner also specifically relies upon In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Lastly, claims 77-85, 93, 94, 108, 119, 131 and 132 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Brody in view of Pristash.

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Rather than repeat the positions of the appellants and the examiner, reference is made to the brief (no reply brief has been filed) for appellants' positions, and to the final rejection and answer for the examiner's positions.

OPINION

For the reasons set forth by the examiner in the final rejection and answer, we sustain each of the above-noted rejections of the claims on appeal as further embellished upon here.

We turn first to the rejection of claims 77 and 137 as being anticipated under 35 U.S.C. § 102(b) by Wunsch. Independent claim 37 requires the separate recitation of an instrument and a light delivery system removably attached to this instrument.

Appellants' position as to this rejection at page 5 of the brief notes that Wunsch's medical-diagnostic inspection spatula 10 is itself light conductive and that there is no separate light delivery system or instrument disclosed in Wunsch to correspond to the instrument of this claim. In response, we agree with the examiner's assessment of this argument at pages 3 and 4 of the answer that the claimed instrument reads on or corresponds to

Wunsch's element 12 which is the rechargeable torch or battery pack for the light conductive spatula 10. To embellish upon the examiner's reasoning here, this rectangular torch/battery pack 12 comprises an opening 11 which is to receive the light conductive spatula 10 as depicted generally in Figure 8. Thus, what the examiner considers to be the claimed instrument, that is, the battery pack 12, is shaped to perform a specified function in accordance with its stated description and appearance with a separately recited light delivery system in the form of the light distribution spatula 10 which itself is removably detached from "this instrument." Between the showings in Figure 1 and Figure 8, the artisan would well appreciate that this claimed light delivery system or light conductive spatula 10 is shaped to conform to the general shape of "the instrument" 12 since the battery pack 12 is shaped in such a manner as to receive within its opening 11 the end portion 13 of the spatula 10, all of this as claimed.

The entire spatula 10 distributes light by receiving it from its source within the battery pack 12 and propagates the light through the spatula 10 by internal reflection as claimed. As the examiner has noted with respect to the surface roughness 26 in

Figures 1 and 5, light is emitted along a portion of the length-wise portion of the spatula 10 for illuminating a viewing area in proximity to the instrument as required by claim 77. It is noted that this functionality is explained according to Wunsch's teachings in the first paragraph at column 4, the discussion of Figure 2 at column 6, lines 11-25 and the synopsis of spatula 10 at lines 48-55. This approach is consistent with a prior art light conductive spatula discussed beginning at column 2, line 44. In each of these instances, it is indicated that it was known in the art that light not only exits the tip portion of the corresponding spatula, but is also refracted in such a manner as to cause light to be emitted from a side portion along the spatula.

It is thus apparent from this discussion that we regard claim 137 as being anticipated by Wunsch and are not persuaded by appellants' corresponding arguments at pages 5 and 6 of the brief. It is emphasized at the earlier-noted teaching at the bottom of column 6 that the light refraction or dispersion occurs on the surface or side portion of the luminous head 15 and at the ends of the prongs 19 and 20 "that is to say at the points where the light should emerge in order to achieve the optimal illumination of the throat cavity." (Column 6, lines 54-56).

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The reliance by the examiner on Mori in addition to Wunsch to reject claims 95, 96, 98, 101, 133 and 136 is noted. Because parent independent claim 136 states that the light delivery system is "shaped to form said instrument" at line 2 of this claim, it appears to read upon the showing of appellants's device 106C of an apparent prior art rake retractor where the light distribution element 760B in Figure 11 is shaped in such a manner as to form the retractor itself. Although the examiner's position is correct according to Wunsch's own teachings at the top of page 4 of the final rejection that this reference does not teach that the multiple light extracting deformities 26 can be multiple lenses as required by claim 136, we do observe that the prior art light conductive spatula discussed at the bottom of column 2 beginning at line 44 of Wunsch does indicate that the luminous head has a central part of the spatula forming a lens and the underside portion of the spatula is provided with a notch which permits the refraction of the light conducted to the lens so that it is reflected downwards as well.

We are therefore unpersuaded by appellants' arguments at page 8 of the brief of the patentability of independent claim 136. As indicated earlier, Wunsch particularly utilizes a form

of a notch discussed at column 2 of the prior art light conductive spatula to form his own light dispersion or extracting deformities 26 in Figures 1 and 5 for dispersal of the light in the side portion of the tip of his light conductive spatula 10.

It is not stated according to Wunsch's teachings per se that the tip portion of the luminous head 15 has ends in the form of lenses, but it is apparent that the artisan would have found this obvious in light of the admitted prior art at column 2 of Wunsch further in view of Mori's teachings. This reference teaches various shapes of lenses or tips 14 among his figures which allow light to "break through" a fiber optic source to provide dispersed illumination as depicted in the various drawings. The showing in Figure 3 expands on the functionality of lenses of Wunsch at column 2 by specifically indicating that light may be diffused using the lens approach. The functionality of directing light toward a viewing area in proximity of an instrument for aiding a medical procedure and for reducing the intensity of a directional component of the light toward a viewing area of the user in claim 136 has already been met by Wunsch alone. According to Wunsch alone, as well as the additional teachings in Mori, it would have been obvious to the artisan to have utilized lenses to

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effect this functionality as well. Among the elements recited at the end of claim 136 on appeal comprising the Markush Group of the instrument, Wunsch is clearly a tongue depressor-like instrument according to its basic teachings.

The separately stated rejection of claim 101 is also sustained within 35 U.S.C. § 103 utilizing the collective teachings and showings of Wunsch and Mori alone, even in addition to the examiner's separate reliance upon In re Dailey. Claim 101 requires that the light emitter means include a tip in the shape of a hook. At the outset, it appears to us that Wunsch alone appears to teach a light conductive spatula 10 generally in the shape of a hook-like element. Because the description of Figure 1 of this reference indicates that the light conductive spatula 10 is formed of polystyrene, it appears to be deformable at the desire of the user for any particular purpose. Additionally, Figure 7 of Mori indicates that his transparent light conductive tubes or sheaths 10 as a whole may be deformed in the manner were the tip ends of these respective elements 10 are shown to exist and be shaped in a form of a hook. Note the description of Figure 7 at column 3, lines 36-44 and 48-53, both of which indicate that the tubes may be shaped into various shapes or desired configurations.

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It is thus apparent to us that the examiner's basic argument with respect to Wunsch and Mori that the shaping of a light emitter in the form of a tip would have been obvious to the artisan as desired for observation in use is well founded according to the noted teachings and suggestions of both references. Additionally, appellants' arguments as to this rejection at pages 8 and 9 of the brief are not persuasive. Appellants' observation that In re Dailey still requires that a hook-shaped tip of a light emitter means be one of numerous noted configurations is misplaced because the evidence before us among both references indicates that such is the case.

Lastly, we turn to the rejection of claims 77-85, 93, 94, 108, 119, 131, and 132 as being obvious over Brody in view of Pristash within 35 U.S.C. § 103. It appears that the examiner's statement of the rejection at pages 2 and 3 of the final rejection applies to all the claims rejected but most specifically the examiner notes three deficiencies with respect to Brody. Brody's initially noted deficiency is that this reference does not teach a light emitter means extending lengthwise along the instrument such that light is emitted along a portion of the length of the light emitter means or optical

fibers. Thus feature applies only to independent claim 77. Appellants recognize this in their remarks at the bottom of page 6 of the brief. The examiner's reasoning of relying additionally upon Pristash is well-taken and restated properly by appellants at the bottom of page 6 of the answer that the combination obviously would have increased within 35 U.S.C. § 103 the area of illumination around the surgical site.

Brody's surgical illuminator in Figure 1 is applied to a retractor 67 in the Figure 8 embodiment. It is comprised of the surgical illuminator 11 of Figure 1 adhesively attached in a conforming manner to the shape of the retractor 67 as shown in Figure 8. It appears that the illumination shown in this figure occurs only at the distal ends 31 of the optical fibers such that only the end portion illuminates the incision 73. For his part, Pristash presents various embodiments of transparent light emitting panels formed in such a manner as to cause light entering a panel along an input edge thereof to be emitted along the length of the panel. Within 35 U.S.C. § 103, we find that the artisan would have found Pristash's teaching an obvious enhancement to Brody for the reasons stated by the examiner since it would have obviously increased the area of illumination within

the cavity of the incision 73 shown in Figure 8 of Brody to include the ability to not only emit light in a parallel manner to the general axis of the retractor 67 as shown in Figure 8 but along its conformal shape to further illuminate the incision area 73 to enhance the surgeon's ability to correctly observe the tissue in the opening associated with this incision. Appellants' argument at pages 6 and 7 of the brief is misplaced because the teaching value of Brody is lost in appellants' analysis. It is not Pristash but Brody which teaches that Brody's own light distribution system 11 conforms to the general shape of the instrument. Appellants' effective hindsight argument is therefore misplaced.

Appellants next argue the subject matter of claims 79, 80, 83 and 84 as a group at the top of page 7 of the brief. The examiner's initial statement as to representative claim 79 among this group of claims at the bottom of page 3 of the final rejection is that clips were well-known equivalents of the adhesive tape 23 in Brody. Appellants appear to agree with this assessment by the statement that the "use of clips to attach one member to another is generally known" as expressed at the middle of page 7 of the brief. Because the use of adhesive tape is

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already recognized by the examiner and appellants to be taught by Brody as well, and because the examiner's position at the bottom of page 4 and the top of page 5 of the answer that appellants' own disclosure discloses the equivalence of using adhesive and clips at lines 4 and 5 of page 21 of the specification as filed, we find the examiner's position to be well-taken. It is thus apparent to us then that appellants' statement at page 7 of the brief that the use of clips to attach one member to another is generally known in the art but not in the claimed combination is misplaced because appellants' own disclosure recognizes the equivalence of adhesive tape and clips in the art in question. Adhesive tape and clips both readily permit easy detachability.

As a final matter, we note that any claim on appeal not specifically discussed by us in this opinion has no argument expressly associated with it by appellants in the brief and therefore falls with its parent independent claims 77 or 137. Since we have sustained each of the four separately stated rejections by the examiner of the claims on appeal, the decision of the examiner 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

James D. Thomas)	
Administrative Patent Judge)	
)	
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Kenneth W. Hairston)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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