

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte HEBAH AHMED, HARJIT S. KOHLI and BEN A. DONNELL

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Appeal No. 2004-2173  
Application No. 09/970,353

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ON BRIEF

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Before FRANKFORT, MCQUADE, and BAHR, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 14 and 19 through 26. Claims 27 through 31, the only other claims remaining in the application, stand allowed. Claims 15 through 18 have been canceled.

Appellants' invention relates to an apparatus and method of protecting and sealing spliced communication lines, particularly in the harsh environment of downhole well applications in the oil

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drilling and oil production industry. Independent claims 1, 6 and 26 are representative of the subject matter on appeal and a copy of those claims can be found in the Appendix to appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Bahder et al. (Bahder)	3,846,578	Nov. 5, 1974
Morrisette et al. (Morrisette)	4,403,110	Sep. 6, 1983
Dery et al. (Dery)	5,006,286	Apr. 9, 1991
Crawley et al. (Crawley)	6,442,304	Aug. 27, 2002

Claims 1, 2, 5 through 14, 19 through 21, 23 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bahder in view of Crawley.<sup>1</sup>

Claims 3, 4, 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bahder in view of Crawley as applied above and further in view of Dery.

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<sup>1</sup> Although the examiner's answer (page 3) also included claim 27 as being subject to this rejection, it is clear from the record of the present application that method claim 27 stands allowed, and that the examiner's inclusion of this claim in the above-noted rejection was in error.

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Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Bahder in view of Crawley as applied above and further in view of Morrisette.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we refer to the examiner's answer (Paper No. 19, mailed April 16, 2004) for the examiner's reasoning in support of the rejections and to appellants' brief (Paper No. 18, filed February 23, 2004) and reply brief (Paper No. 20, filed June 18, 2004) for the arguments thereagainst.

#### OPINION

Having carefully reviewed the obviousness issues raised in this appeal in light of the record before us, we have come to the conclusion that the examiner's rejections under 35 U.S.C. § 103 will not be sustained. Our reasons in support of this determination follow.

Looking first to the examiner's rejection of claims 1, 2, 5 through 14, 19 through 21, 23 and 26 under 35 U.S.C. § 103(a) as

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being unpatentable over Bahder in view of Crawley, we make note of the examiner's findings and conclusions set forth on pages 3-7 and 9-12 of the answer, particularly the finding that column 17, line 56 - column 18, line 7 of Crawley "teaches that a weld and a clamp are functional equivalents as couplings for attaching the communication lines to the protective housing," and the examiner's conclusion that it would have been obvious to one of ordinary skill in the art at the time the appellants' invention was made "to have used a weld as taught by Crawley et al. instead of the clamp of Bahder et al. as couplings for attaching the communication lines to the protective housing since welds and clamps are considered functional equivalents."

It is the above-noted finding from Crawley and the conclusion based thereon which appellants have contested on appeal, urging that the broad disclosure in Crawley pointed to by the examiner (col. 17, line 56 - col. 18, line 7) does not stand for the proposition that a weld is interchangeable with a clamp for any and all applications, and that it is clear from a reading of Bahder that a weld would not provide a suitable manner for sealing the insulating sleeve (10) therein to the insulating shields (8, 9) of the respective communication lines. More

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specifically, appellants contend that Bahder's clamps (11, 12) apply a compressive force to achieve a seal between the insulating sleeve (10) and the insulating shields (8, 9), while substituting a weld for each of Bahder's clamps (11, 12) would not produce this compressive force and thus, would not form a proper seal between Bahder's insulating sleeve (10) and the insulating shields (8, 9) of the communication lines. Moreover, appellants urge that the examiner has failed to cite any language in Bahder or Crawley that would teach or suggest how one skilled in the art could form a seal in Bahder's splice connection using a weld.

The examiner's response to appellants' arguments is to continue to urge that Crawley teaches the "functional equivalence" of the clamps (11, 12) used in Bahder and the weld coupling of Crawley, and to further contend that replacing the clamps of Bahder with welds as purportedly taught by Crawley "would result in the same securing and sealing function occurring" (answer, page 13).

Like appellants, it is our conclusion after having reviewed the disclosures of the Bahder and Crawley patents that the

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examiner has not made out a *prima facie* case of obviousness. More particularly, we fail to find any teaching or suggestion in the applied patents which would have led one of ordinary skill in the art to replace the clamps (11, 12) used in Bahder's splice connector to form a seal between the insulating sleeve (10) and insulation shields (8) and (9) of the cable segments therein, with a weld. While it may be true that Crawley provides an indication (column 17, lines 56+) that "adhesive, solder, a weld, a clamp, . . . [or] a heat shrink sleeve" may be used to form an attachment (239) between the container (238) and coatings (233, 234) of the fiber optic cable segments schematically shown in Figure 23 of that patent, we see no basis except hindsight fueled by speculation and conjecture for the examiner's conclusion that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention to use a weld in place of the clamps (11, 12) in the particular splice coupling disclosed in Bahder. Moreover, we find no reasonable basis to conclude that the insulating sleeve (10) and insulation shields (8) and (9) of the cable segments of Bahder are even capable of being welded together to form a seal as needed in Bahder's splice coupling. Nor do we find any basis for the examiner's assertion that appellants' "thermal insulator" set forth in claims 1 and 6 on

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appeal, and "means for thermally protecting the communication lines" as required in claim 26, are necessarily readable on the insulation shields (8, 9) in Bahder. It would appear that the examiner's conclusion in that regard is based on speculation and conjecture, since Bahder provides no indication of the materials of construction of the insulation shields (8) and (9).

Since it is our determination that the teachings and suggestions to be fairly derived from a collective consideration of the patents to Bahder and Crawley would not have made the subject matter as a whole of independent claims 1, 6, and 26 on appeal obvious to one of ordinary skill in the art at the time of appellants' invention, we must refuse to sustain the examiner's rejection of those claims under 35 U.S.C. § 103(a). It follows that the examiner's rejection of dependent claims 2, 5, 7 through 14, 19 through 21 and 23 under 35 U.S.C. § 103(a) will also not be sustained.

Regarding the examiner's further rejections of dependent claims 3, 4, 22, 24 and 25 under 35 U.S.C. § 103(a), we have reviewed the additional references to Dery and Morrisette relied upon in these rejections, but find nothing therein which

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overcomes or provides for the deficiencies we have identified above with regard to the basic combination of prior art references applied against independent claims 1, 6 and 26. Accordingly, the examiner's rejection of dependent claims 3, 4, 22, 24 and 25 under 35 U.S.C. § 103(a) will likewise not be sustained.

In light of the foregoing, the decision of the examiner to reject claims 1 through 14 and 19 through 26 under 35 U.S.C. § 103(a) is reversed.

REVERSED

CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
JOHN P. MCQUADE	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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	)	
JENNIFER D. BAHR	)	
Administrative Patent Judge	)	

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