

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte FRANK PUSCHNER, JURGEN FISCHER and JOSEF HEITZER

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Appeal No. 2001-1556  
Application 09/333,322

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ON BRIEF

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Before JERRY SMITH, BARRETT and GROSS, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-13, which constitute all the claims in the application. An amendment after final rejection was filed on July 27, 2000 but was denied entry by the examiner.

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The disclosed invention pertains to a carrier element which in combination with a semiconductor chip is to be incorporated into a smart card.

Representative claim 1 is reproduced as follows:

1. In combination with a semiconductor chip, a carrier element, comprising:

an encapsulation composition having main surfaces and opposite edges and encapsulating and protecting the semiconductor chip;

at least two connections disposed on one of said main surfaces of said encapsulation composition along only two of said opposite edges, said at least two connections made of a conductive material and having embossed ends facing one another with a reduced thickness at said embossed ends and with a cross section having a step only on one side of said at least two connections; and

the semiconductor chip disposed on said at least two connections in a region of said reduced thickness and being mechanically connected to said at least two connections resulting in mechanical connections.

The examiner relies on the following references:

Haghiri-Tehrani et al. (Haghiri-Tehrani)	4,829,666	May 16, 1989
LeMaire et al. (LeMaire)	5,134,773	Aug. 04, 1992

Claims 1-13 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers LeMaire in view of Haghiri-Tehrani.

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Rather than repeat the arguments of appellants or the examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the brief along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-13. Accordingly, we reverse.

Appellants have nominally indicated that dependent claims 2-12 stand or fall with claim 1, but that independent claims 1 and 13 are independent (separate?) [brief, page 10]. However, appellants have made no separate arguments with respect to independent claims 1 and 13. Since appellants have failed to

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appropriately argue the separate patentability of these claims, all contested claims stand or fall together. See In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Accordingly, we will consider the rejection against claim 1 as representative of all the claims on appeal.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert.

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denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness.

Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered and are deemed to be waived by appellants [see 37 CFR § 1.192(a)].

With respect to representative, independent claim 1, the examiner finds that LeMaire teaches the claimed invention except for the teaching of a step on only one side of the connection and the teaching of a chip which is physically disposed on the connection in the region of reduced thickness. The examiner

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cites Haghiri-Tehrani and asserts that it would have been obvious to the artisan to modify LeMaire with Haghiri-Tehrani because it would use up less space and create a thinner smart card [final rejection, pages 2-3, incorporated into answer, page 3].

Appellants argue that neither LeMaire nor Haghiri-Tehrani teaches a step on only one side of the connection and a chip which is physically disposed on the connection in the region of reduced thickness. Appellants also argue that the examiner has not pointed to anything in the references which would have motivated the artisan to combine the teachings of these references [brief, pages 10-14].

The examiner further explains the rejection by noting that "only the step-like portion of the connector 10 of LeMaire et al. (see fig. 9) will be considered for combination with only the portion of the connection leads 5 of Haghiri-Tehrani et al. that lie flush against the main surface of the carrier element and only the physical orientation of the semiconductor chip 4 with relation to the connection leads 5. The resulting modified invention would have a stepped portion on inner sides of the connectors (i.e. sides which face one another) and a flat portion on the outer sides of the connectors (i.e. step on only one side

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of the connector). The chip would physically lie on the step-like portion of the connectors" [answer, pages 3-4].

We do not sustain the examiner's rejection of claims 1-13. It is clear from reading the examiner's response to appellants' arguments in the brief that the examiner has selectively chosen only a portion of LeMaire's structure and only a portion of Haghiri-Tehrani's structure and combined these selectively chosen structures in such a manner as to create appellants' invention. The mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). We agree with appellants that the examiner has identified nothing within the teachings of LeMaire and Haghiri-Tehrani which would have led the artisan to selectively combine their teachings in the manner proposed by the examiner. The only rationale proposed by the examiner simply identifies the advantages already disclosed by appellants.

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In view of the above comments, the decision of the  
examiner rejecting claims 1-13 is reversed.

REVERSED

JERRY SMITH	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
LEE E. BARRETT	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
ANITA PELLMAN GROSS	)	
Administrative Patent Judge	)	

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