

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIK HEINEMANN,
FRANK PUSCHNER and
DETLEF HOUDEAU

Appeal No. 2005-0088
Application No. 10/160,629

ON BRIEF

Before KIMLIN, WARREN and OWENS, Administrative Patent Judges.
KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-7.

Claim 1 is illustrative:

1. A smart-card module, comprising:

a substrate film formed of an anisotropically
conductive material and having a surface;

at least one semiconductor chip having connection
points and disposed on said substrate film; and

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contact areas applied directly to said surface of said substrate film, said substrate film disposed between said semiconductor chip and said contact areas causing said substrate film to electrically connect said connection points of said semiconductor chip to said contact areas in a manner of a direct contact and to mechanically support said at least one semiconductor chip.

The examiner relies upon the following references as evidence of obviousness:

Orihara et al. (Orihara)	5,705,852	Jan. 06, 1998
Ikefuji et al. (Ikefuji)	6,404,644	Jun. 11, 2002 (effectively filed Jan. 05, 2000)

Appealed claims 1-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Orihara in view of Ikefuji.

Appellants submit at page 5 of the brief that claims 1-3 stand or fall together with claim 1, whereas claims 4, 5, 6 and 7 are separately argued.

We have thoroughly reviewed appellants' arguments for patentability. However, we are in complete agreement with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the examiner's rejection for the reasons set forth in the

answer, which we incorporate herein, and we add the following for emphasis only.

Both Orihara and Ikefuji are directed to a non-contact IC card, and we totally agree with the examiner that it would have been obvious for one of ordinary skill in the art to have contact areas 2a and 2b of Orihara applied directly to the surface of substrate film 5 of Orihara, as taught by Ikefuji's application of coil 12 to an anisotropic adhesive substrate 19b. Appellants' argument improperly focuses upon substrate 1 of Orihara when, in fact, the examiner's rejection cites anisotropic film 5 as the substrate. Like Orihara, appellants' specification discloses that substrate 3 is a film-like material of an anisotropically conductive hot-melt adhesive film (see page 7, penultimate paragraph). Hence, we perceive no structural distinction between the presently claimed substrate film and film 5 of Orihara or, for that matter, film 19b of Ikefuji. Since film 5 of Orihara and film 19b of Ikefuji are anisotropically adhesive films, there is no merit in appellants' argument that "[t]he substrate [of Orihara] is not made of an anisotropically conductive material" (page 8 of brief, second paragraph).

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Appellants also contend that it would not have been obvious for one of ordinary skill in the art to eliminate the main substrate of Orihara and only use the adhesive film. However, the "comprising" language of the appealed claims does not exclude substrate 1 of Orihara.

Moreover, we fail to perceive any distinction in structure between the IC card of Orihara and the article embraced by claim 1 on appeal. In particular, film 5 of Orihara corresponds to the claimed substrate film, chip 6 corresponds to the claimed semiconductor chip, connecting bumps 6a and 6b correspond to the claimed connection points, and terminals 2a and 2b of the reference correspond to the claimed contact areas that are applied directly to the surface of film 5. Also, by definition, an anisotropic layer is conductive in only one direction. Accordingly, it would appear that Orihara describes the subject matter defined by at least claim 1 on appeal within the meaning of § 102.

As a final point, we note that appellants base no argument upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the prima facie case of obviousness established by the examiner.

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

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES F. WARREN)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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TERRY J. OWENS)	
Administrative Patent Judge)	

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