

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

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(2) is not binding precedent of the Board.

Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HISASHI OHNO

Appeal No. 95-4028
Application 08/097,904¹

ON BRIEF

Before HAIRSTON, KRASS, and CARMICHAEL, Administrative Patent
Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 2, 4
through 6, 8 through 10 and 13 through 18. In an Amendment After

¹ Application for patent filed July 28, 1993.

Appeal No. 95-4028
Application 08/097,904

Final (paper number 16), claims 2, 4 through 6, 13, 15, 17 and 18 were canceled, and claims 1, 8, 10, 14 and 16 were amended. Accordingly, claims 1, 8 through 10, 14 and 16 remain before us on appeal.

The disclosed invention relates to a non-contact IC card that has a circuit board with an electronic circuit mounted on a first surface, and an antenna coil disposed on a second surface. The electronic circuit is covered by a resin package. A plurality of testing wire conductors are located on the side of the circuit board that holds the electronic circuit, and a first end of each of the testing wire conductors is connected to the electronic circuit. The second ends of the testing wire conductors are exposed at the second surface of the circuit board for testing the electronic circuit. The second ends of the testing wire conductors are covered by an electrical insulator.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A non-contact IC card comprising:

a circuit board having opposed first and second surfaces and an antenna coil disposed on the second surface of said circuit board;

an electronic circuit mounted on the first surface of said circuit board and having a plurality of functions;

Appeal No. 95-4028
Application 08/097,904

a resin package disposed on the first surface of said circuit board covering said electronic circuit;

a plurality of testing wire conductors disposed on the first surface of said circuit board, each testing wire conductor being connected at a first end to said electronic circuit and exposed at a second end at the second surface of said circuit board for testing the respective functions of said electronic circuit individually; and

insulating means for covering and electrically insulating said second ends of said testing wire conductors.

No references were relied on by the examiner.

Claims 1, 8 through 10, 14 and 16 stand rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which appellant regards as the invention.

Reference is made to the briefs and the answer for the respective positions of the appellant and the examiner.

OPINION

We have carefully considered the entire record before us, and we will sustain the indefiniteness rejection as to claims 1 and 16, and we will reverse it as to claims 8 through 10 and 14.

According to the examiner, the claims recite "that each testing wire conductor is exposed for testing the respective functions of said electronic circuit, and insulating means for covering and electrically insulating these same testing wire conductors" (Answer, page 3). It is the examiner's position that

Appeal No. 95-4028
Application 08/097,904

the claims are indefinite because "the testing wires could not be tested if they were insulated" (Answer, page 5).

With respect to claim 1, appellant argues (Brief, pages 5 and 6) that:

There is no limitation in claim 1 as to when the testing takes place nor as to when the insulating means covers and electrically insulates the second ends of the testing wire conductors. Moreover, there is no requirement in claim 1 that the testing wire conductors be exposed generally in the completed IC card. Rather, claim 1 only requires that the testing wire conductors be exposed at the second surface of the circuit board. As plainly apparent from the embodiment of the invention shown in Figure 3, even when the insulating means, the sheet 17 in Figure 3, is in place, the testing wire conductors are still exposed at the second surface of the circuit board. Thus, no inconsistency can be found in the language of independent claim 1.

Appellant additionally argues (Reply Brief, pages 3 and 4) that:

It matters not whether insulating means or any other object is present and covers the second surface of the circuit board or the second ends of the testing wire conductors because, in any event, those second ends of the testing wire conductors are still present, i.e., exposed at, the second surface of the circuit board.

With respect to claim 14, appellant argues (Reply Brief, page 4) that:

The Examiner's arguments make it appear that claim 14 also includes the "for testing" language of claim 1. It does not. All that claim 14 requires is that each testing wire conductor be exposed at an end of a resin package, just as they are shown in Figures 9 and 11 of the application. Testing using those conductors and

the timing of testing, the entire focus of one-half of the Examiner's arguments regarding claim 14, are irrelevant to any language found in claim 14 or its dependent claims.

Thus, just as in claim 1, in claim 14, which is free of the language that confused the Examiner, a definitive structural relationship between the end surface of the resin package and each testing wire conductor is described that exists whether insulating means or another object covers or electrically insulates those second ends of the testing wire conductors. This structural relationship is so plain and simple that the rejection of the claims as indefinite is nearly incredible.

When claim 1 is read in light of the application disclosure,² we agree with the appellant that "even when the insulating means, the sheet 17 in Figure 3, is in place, the testing wire conductors are still exposed at the second surface of the circuit board" (Brief, page 6). On the other hand, the testing wire conductors when covered by the insulating means are not exposed "for testing the respective functions of said electronic circuit individually" as required by claim 1. Thus, we agree with the examiner's position that "the testing wires could not be tested if they were insulated" (Answer, page 5).

² Any analysis under § 112 should begin with a determination of whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the application disclosure as they would be by one possessing ordinary skill in the art. See In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

Appeal No. 95-4028
Application 08/097,904

The indefiniteness rejection of claim 1 is sustained. The indefiniteness rejection of dependent claim 16 is likewise sustained.

The principal reason for sustaining the indefiniteness rejection of claim 1 is also the principal reason for reversing the indefiniteness rejection of claim 14. Appellant's argument (Reply Brief, page 4) that claim 14 does not include the noted "for testing" language that appears in claim 1 is correct. Claim 14 merely requires that the testing wire conductors be exposed at an end surface of the resin package, and that an insulating means electrically insulate the ends of the testing wire conductors. No testing of the electronic circuit is required in claim 14. For this reason, claim 14 and the claims that depend therefrom are definite. The indefiniteness rejection of claims 8 through 10 and 14 is reversed.

DECISION

The decision of the examiner rejecting claims 1, 8 through 10, 14 and 16 under the second paragraph of 35 U.S.C. § 112 is sustained as to claims 1 and 16, and is reversed as to claims 8 through 10 and 14. In summary, the decision of the examiner is affirmed-in-part.

Appeal No. 95-4028
Application 08/097,904

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

AFFIRMED-IN-PART

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Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	
Administrative Patent Judge)	APPEALS AND
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Appeal No. 95-4028
Application 08/097,904

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