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**Datasheet for the decision  
of 6 September 2019**

**Case Number:** T 0242/13 - 3.4.01

**Application Number:** 01926396.1

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**IPC:** H01Q1/36, B65D5/42, G06K19/073,  
G06K19/077, G08B13/24

**Language of the proceedings:** EN

**Title of invention:**  
A TAMPER INDICATING RADIO FREQUENCY IDENTIFICATION LABEL

**Patent Proprietor:**  
Mikoh Corporation

**Opponent:**  
Leonhard Kurz Stiftung & Co. KG

**Headword:**  
Tamper-resistant RFID label / Mikoh

**Relevant legal provisions:**  
EPC Art. 52(1), 54

**Keyword:**  
Novelty - (no)



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Case Number: T 0242/13 - 3.4.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.01**  
**of 6 September 2019**

**Appellant:** Mikoh Corporation  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
30 November 2012 concerning maintenance of the  
European Patent No. 1249055 in amended form.**

**Composition of the Board:**

**Chairman** P. Scriven  
**Members:** F. Neumann  
J. Geschwind

## **Summary of Facts and Submissions**

- I. Both parties appealed against the Opposition Division's decision to maintain the patent in amended form.
- II. The Opposition Division held, *inter alia*, that claim 1 as granted was not new with respect to the disclosure of document E1.
- III. In its statement setting out the grounds of appeal, the proprietor requested that the patent be maintained as granted and submitted that the subject-matter of claim 1 in that version was new with respect to E1, and would not have been obvious for the skilled person starting from E1.
- IV. In its statement of grounds, the opponent submitted that the claims, as maintained by the Opposition Division, contained added subject-matter. Furthermore, the subject-matter of claim 1, as maintained, was not new with respect to the disclosure of document E14, which was filed for the first time with the statement of grounds. Moreover, claim 1 would have been obvious to the skilled person starting from E3.
- V. In response to the proprietor's statement of grounds, the opponent reiterated its submissions, presented in the first-instance proceedings, that claim 1 as granted lacked novelty with respect to E2.

VI. In response to the opponent's objections (points IV and V, above), the proprietor submitted that the claims, as granted, did not include any added subject-matter. The proprietor questioned the prior-art status of E14 and submitted arguments to show that claim 1, as granted, was new with respect to both E1 and E2. Inventive step was discussed with regard to various combinations of E1 to E4.

VII. The Board issued a communication in preparation of oral proceedings, and briefly addressed all of the issues raised. Inter alia, the Board set out its preliminary opinion that claim 1, as granted, was new with respect to E2.

VIII. The proprietor informed the Board that it would not be represented at the oral proceedings.

IX. At the oral proceedings, which were held in the absence of the proprietor, the novelty of claim 1, in the versions as maintained by the Opposition Division and as granted, was discussed with respect to the disclosure of E2.

X. The final requests of the parties were formulated as follows:

The proprietor requested (in writing) that the decision under appeal be set aside and that the patent be maintained as granted.

The opponent requested that the decision under appeal be set aside, that the appeal of the proprietor be dismissed, and that the patent be revoked.

XI. Claim 1, as granted, reads as follows:

*A tamper indicating label (100) comprising:  
an RFID layer (101) comprising RFID  
components providing an RFID function;  
an adhesive layer (103) supporting the RFID  
layer (101);  
a destructible electrically conducting path  
(102) sandwiched between the RFID layer  
(101) and the adhesive layer (103) so that  
at least a portion of the destructible  
conducting path (102) is in contact with the  
adhesive layer (103), whereby the  
destructible conducting path (102) is  
disrupted or modified when the label (100)  
is tampered, thereby modifying the RFID  
function of the RFID layer (101);  
characterized by:  
a pattern of an adhesion modifying coating  
between the RFID layer (101) and the  
adhesive layer (103), the adhesion  
modifying coating modifying adhesion  
characteristics of the destructible  
conducting path thereby enhancing the  
destructibility of the destructible  
conducting path (102).*

XII. Claim 1, as maintained by the Opposition Division, is identical to the granted version of claim 1, with the exception that the characterising portion reads:

*a pattern of an adhesion modifying coating between the RFID layer (101) and the adhesive layer (103), the adhesion modifying coating reducing adhesion characteristics of the destructible conducting path thereby enhancing the destructibility of the destructible conducting path (102).*

XIII. The following documents are referred to in this decision:

E1: EP-A-0 955 616;  
E2: US-A-5 767 772;  
E3: WO-A-96/07996;  
E4: DE-T2-692 09 851;  
E14: JP 2001-013874.

XIV. The arguments of the parties, insofar as they are pertinent, are set out below in the reasons for the decision.

## **Reasons for the Decision**

### *The invention*

1. The contested patent concerns a security measure for remotely detecting whether an RFID label, applied to an item, has been tampered with or removed. A conducting path, provided within the RFID label, is designed to be modified when the label is tampered with. This

modification of the conducting path can be detected by an electronic module in the label and a warning signal can be transmitted to a surveillance system.

*Claim 1 as granted - novelty*

2. E2 discloses a security label which can be attached to an object so that unauthorised removal of the object from a surveillance zone can be detected (column 1, lines 5-8). The security label of E2 also detects unauthorised attempts to remove it from the object to which it is attached (column 3, lines 29-33), and is, therefore, a tamper-indicating label.
  
3. The tamper-indicating label of D2 has an RFID layer 101 comprising RFID components providing an RFID function (column 4, lines 51-59). An adhesive layer 302 supports the RFID layer (this supporting function is more readily apparent when Figure 4 is viewed upside down). A destructible, electrically-conducting path 15 (known in this technical field as a *tamper track*) is sandwiched between the RFID layer 101 and the adhesive layer 302 so that at least a portion of the tamper track is in contact with the adhesive layer 302 (Figure 4). The tamper track 15 is disrupted when the label is tampered with (column 3, lines 34-39). The electronic module in the RFID layer senses when the tamper track 15 is ruptured, and transmits a signal which is picked up by the surveillance equipment (column 3, lines 55-58). The tampering attempt therefore modifies the RFID function of the RFID layer, to the extent that the data which is transmitted by the RFID module is modified.

4. The tamper-indicating label of D2 includes a peel-off layer 200 which coats the RFID layer 101 and is disposed between the RFID layer 101 and the adhesive layer 302. The peel-off layer is provided with a number of apertures through which the tamper track is routed (Figure 4). The tamper track is secured in each of the apertures to the RFID layer, which lies beneath the peel-off layer, and runs from one aperture to the next via the top surface of the peel-off layer. By virtue of this routing, the tamper track 15 is not uniformly adhered to the adhesive layer 302; the track sticks to the adhesive layer 302 between the apertures, but does not stick at the apertures. The peel-off layer 200 can therefore be seen to be a pattern of an adhesion modifying coating which modifies adhesion characteristics of the tamper track 15.
  
5. The final feature of claim 1 concerns the degree of destructibility of the tamper track. Specifically, the modification of adhesive characteristics of the tamper track enhances its destructibility.
  
6. As explained above, the pattern of apertures in the peel-off layer means that some portions of the tamper track will stick to the adhesive layer 302, but, in the region of the apertures, other portions will not stick to it. The provision of the apertures, and the resulting adhesion pattern of the tamper track to the adhesive layer, guarantees rupture of the tamper track even in the case that the peel-off layer is only minimally tampered with. Specifically, if the peel-off layer were to be lifted only at one corner of the label, the delamination of the peel-off layer 200 from the RFID layer 101 would cause the tamper track to break. Without the pattern of apertures in the peel-off layer, it would not be possible to route the tamper



track between the RFID layer 101 and the adhesive layer 302 in the manner illustrated in Figure 4 of D2. In fact, the tamper track would run along the top surface of the peel-off layer and would adhere to the adhesive layer 302 uniformly along its entire length. The peel-off layer would not modify the adhesion characteristics of the tamper track in any way. With such an arrangement, if one corner of the peel-off layer were lifted, rupture of the tamper track would not necessarily occur. The tamper track would remain undisturbed between the top surface of the peel-off layer and the adhesive layer 302, and would only rupture if the tamper track would be torn from the electronic module 5,13, which is attached to the RFID layer (Figures 1, 2, 5b; column 5, lines 34-38). To this extent, the adhesion modifying coating provided in the form of the peel-off layer in D2, enhances the destructibility of the tamper track.

7. All features of claim 1 are, therefore, known from D2.
8. With respect to the disclosure of D2, the proprietor submitted that D2 did not disclose an adhesion modifying coating or an adhesive layer of the type required by claim 1. In particular, there was no disclosure that an adhesive property could be modified along a particular stratum, so that a particular layer could be destroyed, as in the present invention. Instead, the change in resistive properties of the conducting path in D2 was associated with the separation of different strata, rather than with the destruction and modification of a single layer (as illustrated in Fig 2B of patent).
9. The Board cannot follow this argument.

10. The Board agrees that the tamper track of D2 is not destroyed in the same manner as it is in the contested patent. In Figure 2B of the contested patent, it can be seen that as the two layers 101 and 103 are separated, different portions of the tamper track remain adhered to either the overlying or the underlying layer. This results in destruction along a single stratum. In D2, when an attempt is made to remove the peel-off layer, the conductive path will be severed in the region of the apertures. Some portions of the track will remain adhered to the adhesive layer 302 while other portions remain adhered to the RFID layer at points 105. Destruction of the tamper track does not occur along a single stratum, since the peel-off layer 200 is disposed between the two strata 302, 101 to which the track remains adhered. However, claim 1 does not define an arrangement which inevitably produces the destruction pattern of Figure 2B. Claim 1 only defines that the adhesion characteristics of the tamper track are modified by an adhesion modifying coating, thereby enhancing its destructibility. As shown above, the patterned peel-off layer can be seen to be an adhesion modifying coating, and the modification of the adhesion characteristics of the tamper track caused by the presence of the apertures, enhances the destructibility of the tamper track.
11. As a result, the subject-matter of claim 1 is not new (Articles 52(1), 54 EPC).

*Claim 1 as maintained by the Opposition Division - novelty*

12. Claim 1 as maintained by the Opposition Division specifies that the adhesion modifying coating **reduces** adhesion characteristics of the tamper track.

13. As shown above, the provision of the patterned peel-off layer in D2 means that, in the region of the apertures, the tamper track does not stick to the adhesive layer 302. Thus, the adhesion of the tamper track to the adhesive layer 302 is reduced at the apertures.
14. The subject-matter of claim 1 is therefore not new (Articles 52(1), 54 EPC).

*Absence of the proprietor from oral proceedings*

15. The Board is not obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned (Case Law of the Boards of Appeal of the European Patent Office, 9th edition 2019, V.A.4.5.3).
16. After both parties had been summoned to oral proceedings, the proprietor informed the Board, with the submission of 12 July 2019, that it would not be attending. By absenting itself from the oral proceedings, the proprietor gave up the opportunity to comment on any arguments which were discussed there.

**Order**

**For these reasons it is decided that:**

The decision under appeal is set aside.

The patent is revoked.

The Registrar:

The Chairman:



D. Meyfahrt

P. Scriven

Decision electronically authenticated