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**Datasheet for the decision  
of 7 July 2015**

**Case Number:** T 2479/10 - 3.4.01

**Application Number:** 03748885.5

**Publication Number:** 1470528

**IPC:** G06K19/077, H01L21/58, B31D1/02

**Language of the proceedings:** EN

**Title of invention:**  
METHOD FOR MANUFACTURING RFID LABELS

**Patent Proprietor:**  
AVERY DENNISON CORPORATION

**Opponents:**  
NXP B.V.  
Mühlbauer AG

**Headword:**

**Relevant legal provisions:**  
EPC 1973 Art. 100(c), 123(2), 123(3)

**Keyword:**  
added subject-  
matter (yes : main request; no : first auxiliary request)  
extension of protection conferred (no: first auxiliary request  
)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern  
Boards of Appeal  
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Case Number: T 2479/10 - 3.4.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.01**  
**of 7 July 2015**

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**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 29 October 2010  
revoking European patent No. 1470528 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

<b>Chairman</b>	G. Assi
<b>Members:</b>	H. Wolfrum
	J. Geschwind

## **Summary of Facts and Submissions**

- I. Two oppositions had been filed against the present patent. One of them was later withdrawn.

The opposition division revoked the patent under Article 100(c) EPC 1973 and Article 101(3)(b) in conjunction with Article 123(2) EPC, respectively, for the reason of added subject-matter in claim 1 of each of a main request and five auxiliary requests then on file.

- II. The appellant (patent proprietor) lodged an appeal against this decision. In its statement setting out the grounds of appeal the appellant provided a detailed reasoning as to why the opposition division had erred in its decision and requested, by way of a main request, that the contested decision be set aside and the patent be maintained as granted. Alternatively, the appellant requested maintenance of the patent in amended form on the basis of new sets of claims according to 11 auxiliary requests, all filed with the statement of grounds of appeal.

- III. In reply, the sole remaining respondent (opponent NXP B.V.) requested that all requests of the appellant be refused and the revocation of the patent as a whole be confirmed.

- IV. Upon a respective request of each party, the parties were summoned to oral proceedings. In a communication, the Board stated that the appeal proceedings would focus on the issue of added subject-matter (Article 123(2) EPC).

V. In reaction to the summons to oral proceedings the appellant confirmed its requests filed with the statement of grounds of appeal and provided further arguments in support of its position.

The respondent announced that it would not take part nor be represented at the oral proceedings.

VI. In the oral proceedings, which were held in the absence of the respondent, the appellant confirmed its main request made in writing. Moreover, the appellant filed eleven new auxiliary requests.

The sole point of debate for the requests on file was the question of added subject-matter.

VII. Claim 1 of the appellant's main request reads as follows :

*"1. A method of forming an RFID device, the method comprising:*

*providing an RFID webstock of polymeric material having an array of RFID chips (454; 464; 474);*

*providing an antenna web (500) having antennas (510) spaced thereon;*

*dividing the RFID webstock into a plurality of sections (520), each of the sections (520) including one or more of the RFID chips (454; 464; 474) and a portion of the polymeric material;*

*indexing pitch of the RFID sections (520) from a high density on the RFID webstock, to a relatively low density; and*

*attaching the sections (520) to the antenna web (500) in an automatic continuous process, so that each of the RFID sections (520) is adjacent to and coupled*

*to one of the antennas (510), to thereby form an RFID inlay stock."*

Claims 2 to 25 are dependent claims.

Claim 1 of the first auxiliary request adds to the step of "*providing an RFID webstock*" the complement "*wherein the RFID webstock has a surface without recesses, and wherein the RFID chips are secured to the unindented surface of the RFID webstock*".

Claims 2 to 19 are dependent claims.

Each of claims 1 of the second to eleventh auxiliary requests is based on claim 1 of the first auxiliary request and adds further process details.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Although having been duly summoned, the respondent did not attend the oral proceedings. In accordance with Rule 115(2) EPC and Article 15(3) RPBA, the proceedings were continued without that party.
3. Appellant's main request - added subject-matter

The crucial feature here is the definition "*each of the sections including ... a portion of the polymeric material*" in claim 1 of the patent as granted.

- 3.1 There is consent with the appellant that, because of the use of the definite article, "*the polymeric material*" which is required to be included in each of

the "*sections*" is the polymeric material of the "*RFID webstock*". In other words, polymeric material of the initial RFID webstock remains as a constituent of an RFID section during further processing after the RFID webstock has been divided into a plurality of sections.

3.2 The opposition division held in the contested decision that the feature that the "*sections*" include "*a portion of the polymeric material*" was not literally disclosed in the application as filed, nor was it directly and unambiguously derivable - also in combination with common general knowledge - therefrom (point 3 of the "*Reasons*").

3.3 The appellant conceded that the feature in question was not explicitly mentioned in the originally-filed application documents. Nevertheless, it was directly and unambiguously derivable from the original application documents as an implicitly disclosed feature. Reference was made to paragraphs [0015], [0016], [0020] to [0023], [0031], [0033], [0035], [0054], [0058], [0071] to [0075], [0077], [0082], [0116] and [0117].

It was apparent from the application documents as a whole that it was the purpose of the RFID webstock to provide support for the array of RFID chips throughout all processing steps for forming an RFID inlay stock in that the RFID chips were for instance held in recesses of the webstock substrate. Thus, a skilled person reading the application had readily implied that each section, which had to carry one or more RFID chips, quite naturally included a portion of the substrate material of the RFID webstock when the RFID webstock was divided into sections. Particular attention had to be paid in this context to the preposition "*into*".



Such an understanding of the invention was arrived at, regardless as to whether or not a planarization layer was coated on top of the recesses. As followed from paragraph [0072], the planarization layer did not render the webstock substrate obsolete but merely maintained the RFID chips in position in their recesses on the substrate during further processing steps. Moreover, concrete evidence for the continued presence of the RFID webstock material in the divided sections was provided notably by paragraphs [0116] and [0117] of the application as filed. There, reference was made to the function of the desirable properties of the webstock as being dictated by the processes for forming the inlay stock, the properties including clean, sharp die cutting characteristics and adequate strength to avoid web breaks. In this context, a suitable polymeric film substrate had *inter alia* to exhibit good adhesion with the planarization layer.

3.4 The appellant's arguments are not convincing.

3.4.1 The Board concurs with the appellant to the extent that features which are only implicitly derivable from an application as originally filed may nevertheless be used for amendment to a claim definition without infringing the requirement of Article 123(2) EPC. However, the standard to be met in such a case is that an amendment is directly and unambiguously derivable from the original application documents.

It follows therefrom, that, as a matter of principle, the concept of an implicit disclosure cannot apply to situations for which the feature in question constitutes but one of two or more conceivable alternatives.

3.4.2 In the present case, the application documents as a whole happen to be ambiguous as regards a continued presence of RFID webstock substrate material in the severed RFID sections. The Board does not deny that some passages of the application description could be interpreted as alluding to such a possibility. However, such an interpretation is far from being unequivocal.

3.4.3 To illustrate the problem, reference is made to paragraph [0072] of the description which deals with providing the RFID webstock with RFID chips :

*"The polymer film includes wells that are filled with tiny electronic component chips via a Fluidic Self-Assembly (FSA) process, such as that developed by Alien Technology Corporation of Morgan Hill, California. Then, a planarizing layer is coated on top of the filled wells. The purpose of the planarization is to fill any gaps that still may be present; to provide a smooth, flat surface for later processes, such as the etching of vias; to assure that the microelectronic block elements (i.e. chips) are maintained in position in their recesses on the substrate during further processing steps; and to provide mechanical integrity for the laminate. "Vias" are then created with etching techniques. The vias are then coated with aluminum to form a pair of pads on opposite sides of the chip for electronic connection. The polymeric film web at this stage of the process, with embedded chips and associated pads, is referred to in the present application as an "RFID webstock" (or in the case of a sheet substrate, "RFID sheetstock")."*

In the appellant's view, the "later processes" and the "further processing steps", during which the polymeric film web of the RFID webstock would be present, should

be understood as including all steps up to forming the final RFID inlay stock.

However, the cited passages do not say so. Instead, the said "*processes*" and "*further processing steps*" referred to in paragraph [0072] could as well be understood as referring to all those steps, "*such as the etching of vias*" and their coating "*with aluminum to form a pair of pads*", which precede the step of dividing the RFID webstock into a plurality of sections, as it is indeed described in subsequent paragraph [0073] of the application.

Moreover, it is apparent from the cited passages that the RFID webstock provides only an initial support for the RFID chips which, when being provided by an FSA process, happen to sit loosely within the recesses of the RFID webstock. By filling any gaps in the recesses, it is clearly the function of the planarization layer to provide the required mechanical support for the chips during further processing, whereas the polymeric substrate material of the initial RFID webstock is no longer required and becomes functionally obsolete.

- 3.4.4 Such an understanding is in fact confirmed by the application description, which lists at two occasions (paragraphs [0073] and [0074]) the components of an RFID section as including "*one or more electronic component chips, with associated planarization layer and conductive pads*". Polymeric material from the RFID webstock is not mentioned in this context.
- 3.4.5 Because of the fact that the phrase "*The polymeric film web at this stage of the process, with embedded chips and associated pads*" in paragraph [0072], which "*is*

*referred to in the present application as an "RFID webstock"* could readily be understood as referring to the planarization layer holding the array of chips, the reference in paragraph [0116] to *"web breaks during operations such as matrix stripping"* cannot be perceived as unambiguous evidence for the presence of any initial polymeric webstock material in severed sections when being attached to the antenna web.

3.4.6 Similarly, the passage *"a suitable polymeric film substrate is one that ... exhibits good adhesion with the planarizing layer"* in paragraph [0117] does not provide a clear indication for severed sections with polymeric webstock material present during later process stages. After all, *"good adhesion"* is a vague term.

3.4.7 In the absence of any clear indication as to the presence in severed RFID sections of the polymeric material which forms the substrate of the initial RFID webstock as well as in the absence of any recognizable function which such material would possibly serve, an unbiased reader of the application documents has no reason to pay any attention in this regard and to suspect that such material formed a constituent of the RFID sections attached to the antenna web.

3.5 For the above reasons, claim 1 of the main request contains subject-matter which extends beyond the content of the application as originally filed.

Therefore, the ground of opposition according to Article 100(c) EPC in conjunction with Article 123(2) EPC prejudices the maintenance of the patent as granted so that the main request is not allowable.

4. First auxiliary request

- 4.1 Claim 1 of the first auxiliary request is based on original claim 30 and the pieces of information "*Alternatively, the RFID webstock may be without recesses, wherein the chips are secured to unindented surfaces of the webstock.*" disclosed in paragraph [0035] of the original description.

The claim is directed to an alternative structure of the RFID webstock which does not possess recesses and has the RFID chips secured to the unindented surface of the webstock. In the absence of a planarization layer, there is no question that it is the polymeric material of the webstock which is included in the plurality of sections where it provides the necessary mechanical support for the chips during the process steps for forming an RFID inlay.

Having regard to claim 1 of the patent as granted, the features added to claim 1 further limit the claimed subject-matter.

- 4.2 Dependent claims 2, 3, 5 and 6 correspond to original claims 31 to 33 and 35, respectively.

The basis of disclosure for the additional features according to claims 7 and 8 is given by original claim 34.

Claims 9 to 13 and 19 correspond to original claims 36, 45, 37 to 39 and 42, respectively.

The additional features given in claim 4 are disclosed in paragraph [0082] of the originally-filed description; those of claim 14 are disclosed in each of

paragraphs [0031] and [0070]; that of claim 15 in paragraph [0078]; those of claims 16 and 17 in paragraph [0070]; and those of claim 18 are disclosed in paragraph [0055].

- 4.3 For the above reasons, the Board is satisfied that the first auxiliary request complies with the requirements of Articles 123(2) and (3) EPC.

In this situation there was no need to take into consideration any of the lower-ranking auxiliary requests.

5. Since the opposition division did not decide on the other grounds of opposition that were raised in opposition, the Board considers it appropriate to remit the case to the opposition division for further prosecution on the basis of the first auxiliary request on file.

## **Order**

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

For these reasons it is decided that :

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution on the basis of the set of claims 1 to 19 of the appellant's first auxiliary request filed during the oral proceedings of 7 July 2015.

The Registrar:

The Chairman:



R. Schumacher

G. Assi

Decision electronically authenticated