Internal distribution code:

(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 26 April 2022

Case Number: T 1013/18 - 3.3.06

Application Number: 13170733.3

Publication Number: 2811070

IPC: D21H23/52, B05C1/08, D21H23/56

Language of the proceedings: EN

Title of invention:
APPLICATION UNIT OF A COATING OR SIZING DEVICE FOR APPLYING TREATMENT SUBSTANCE ON A FIBER WEB

Patent Proprietor:
Valmet Technologies, Inc.

Opponent:
Mattssonföretagen I Uddevalla Aktiebolag

Headword:
Valmet/Application unit

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1013/18 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 26 April 2022

Appellant: (Opponent)	Mattssonföretagen I Uddevalla Aktiebolag Gustaf Mattssons Väg 2 451 50 Uddevalla (SE)
Representative:	Keijser Bergöö, Malin Katarina Rouse AB Docketing, PO Box 42 683 21 Hagfors (SE)
Respondent: (Patent Proprietor)	Valmet Technologies, Inc. Keilasatama 5 02150 Espoo (FI)
Representative:	Berggren Oy P.O. Box 16 Eteläinen Rautatiekatu 10A 00101 Helsinki (FI)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 28 February 2018 rejecting the opposition filed against European patent No. 2811070 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	J.-M. Schwaller
Members:	S. Arrojo
	R. Cramer

Summary of Facts and Submissions

I. An appeal was filed by the opponent against **the decision of the opposition division to reject the opposition against European patent 2 811 070**, claim 1 thereof reading:

"Application unit of a coating or sizing device for applying treatment substance on a fiber web, characterized in that application unit comprises a support beam (13) and an application module (10) comprising at one of its longitudinal ends an opening for the treatment substance inlet, a feed chamber (11) with feed openings located spaced apart in longitudinal direction of the application module (10) and a flow-through at the other longitudinal end of the application module (10), which application module (10) is supported by an attachment element (12) on the support beam (13), and that the application module (10) is constructed at least partially of composite material."

II. With the statement of grounds of appeal, the appellant requested to revoke the patent in its entirety, arguing that claim 1 as granted was not novel in view of the newly filed document D7 (US 6,579,366 B2), and not inventive in view of document D1 (WO 2012/118438 Al) combined with the teachings of D4 (US 6,202,557 Bl). Together with document D7 the appellant also submitted document D8 (DE 10 2008 041 116).

III. In its reply, the patent proprietor and respondent requested to dismiss the appeal and not to admit documents D7 and D8 into the appeal proceedings.

IV. In its preliminary opinion, the board concluded that the appeal ground under Article 100(a) EPC in combination with Article 56 EPC prejudiced the maintenance of the patent as granted, because claim 1 was not inventive in view of D1 combined with the teachings of D4.

V. At the oral proceedings, which took place on 26 April 2022, the parties confirmed their original requests as follows:

The appellant requested that the decision of the opposition division be set aside and the patent be revoked in its entirety.

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. Admittance of D7 and D8

1.1 Since these documents were filed to substantiate new novelty and inventive step objections against the claims as granted, it is apparent that they could and should have been filed earlier during first instance proceedings. The board however notes that since the patent is in any case revoked, there is no need to decide on the admittance of these documents.

2. Patent as granted - Inventive step

The board has concluded that the opposition ground under Article 100(a) EPC in combination with Article 56 EPC prejudices the maintenance of the patent as granted for the following reasons:

2.1 Closest prior art

2.1.1 In agreement with the parties, the board also regards document D1 as the closest prior art, as it discloses (figures 2, 3a, 3b, 4 and 5) an application unit having the same structure and purpose as that defined in claim 1 at issue.

2.1.2 The appellant argued that while there was no explicit disclosure in D1 of a flow-through at the longitudinal end of the application module, this feature was implicitly disclosed because it could be directly identified in figures 1 and 2 of this document.

2.1.3 The board cannot agree with this argument, because the elements alleged to be a flow-through in figures 1 and 2 of D1 could indeed correspond to this feature, but they cannot be regarded as a direct and unambiguous disclosure of a flow-through as defined in claim 1, as they are neither described nor associated with any reference number in the drawings.

The subject-matter of claim 1 therefore differs from document D1 in that:

i) a flow-through is provided at the longitudinal end of the application module; and

ii) the application module is constructed at least partially of composite material.

2.2 Problem solved by the invention

2.2.1 According to paragraph [0004] of the patent, the application modules are typically constructed with acid proof steel. However, such constructions are heavy, and

therefore difficult to move. Additionally, the steel structures are expensive, complicated to produce and sometimes not resistant enough to chemicals.

2.2.2 In view of these indications, the proprietor argued that the invention solved the problem of providing an application module for an application unit of a coating or sizing device, which was more easily movable and at the same time resistant to corrosive chemicals.

2.2.3 The board notes that claim 1 at issue is not restricted to any specific composite and that the term "composite" is so broad that it encompasses materials which might be heavier than steel (e.g. tungsten carbide composite) and/or would not withstand certain corrosive conditions. It is therefore doubtful that the invention is able to achieve the technical effects claimed in the patent over the entire scope of protection.

However, for the sake of the argument, the board will assume (in the respondent's favour) that the claimed invention successfully solves the problem of providing a lighter configuration with lower costs while maintaining the resistance to certain chemical substances.

2.3 Obviousness of the solution

2.3.1 Document D4 discloses (col. 1, lines 8-10) an application unit comprising a roll for the coating of a paper or cardboard web. According to this document, conventional rolls include a heavy metal core, which increases the weight of the unit and creates mobility issues. To solve this problem, D4 proposes (col. 1, lines 41-43) to replace the metal core with a composite material such as glass-fiber reinforced plastic or

carbon-fiber reinforced plastic. These materials are generally lighter and cheaper, so they can be used to improve the mobility of the application roll while also reducing the cost of the structure (col. 1, lines 46-47 and 59-60).

2.3.2 The opposition division and the proprietor argued that concerning the flow-through at the longitudinal end of the application module (difference 2.1.3. i), document D1 did not directly and unambiguously disclose this feature and did also not provide any hint to consider it. In fact, according to D1 (page 8, lines 8-11), in one configuration the liquid was supplied from both ends, which would prevent the skilled person from considering a flow-through construction at one longitudinal end. At the oral proceedings, the proprietor further indicated that the feature observed in figures 1 and 2 of D1 was unlikely to be a flow-through, because it was not located at the top of the module, which would be required to act as vent for eliminating the gases from the module. The feature observed in figures 1 and 2 could further be one of several options, such as a pressure sensor, a hole for wiring or an opening for cleaning purposes. Thus, the argument that this feature corresponded to a flow-through as defined in claim 1 at issue was speculative.

Concerning the use of a composite for the construction of the module (difference 2.1.3. ii), there was no apparent reason to consider the teachings of D4 when starting from document D1, because the devices in these documents were structurally and functionally different, which implied that they had different requirements, sizes and weights. For example, while the module in D1 was small and moved in the millimeter range, the roll in D4 was large and intended to rotate at high speed.

Furthermore, the application module according to the invention of D1 had specific requirements in terms of chemical resistance because it was directly in contact with the coating or sizing liquid, which was not the case for the roll of D4.

Moreover, even if the teachings of D4 were taken into account, there would still be no hint to use the composite material to construct the application module in particular rather than other portions of the unit. In fact, document D1 indicated (page 3, lines 16-19) that cheaper materials such as low alloy steel could be used in the support body in order to save costs, from which it followed that if a cheaper material were to be used in the application unit of D1 it would be considered for the construction of the support body rather than for that of the module.

The subject-matter of claim 1 was therefore not rendered obvious by the combined teachings of documents D1 and D4.

2.3.3 The board disagrees with the above argumentation because the patent at issue indicates (col. 1, lines 44-49) that the provision of a flow-through at one longitudinal end of the application module is part of a typical configuration of known application units. While, as indicated above, the elements identified by the appellant as a flow-through in figures 1 and 2 of D1 do not provide a direct and unambiguous disclosure of this feature, they appear to correspond to small conduits arranged at the longitudinal end of the module, whose more likely function is that of providing a flow-through when the coating liquid is supplied from the opposite end. In this respect, the alleged incompatibility of the flow-through and the

configuration with two supplies at opposite ends is irrelevant, because D1 also discloses (page 8, lines 8-10) a configuration with a single supply at one end, which appears to be the one shown in the figures. The fact that the small conduits depicted in figures 1 and 2 of D1 are not arranged at the top of the unit appears to be consistent with the functions of this feature, because as pointed out by the appellant, the flow-through is not only intended to vent gases but also to eliminate sediments, for which a central position makes more technical sense. In any case, it has not been contested that this feature is known and commonly used in this type of units, and that the flow-through is not intended to provide an inventive contribution, so regardless of how the contested feature in figures 1 and 2 of D1 is interpreted, it is not apparent how the provision of a flow-through could render claim 1 inventive. All in all, the board concludes that adding a flow-through at the longitudinal end of the unit in D1 would be an obvious consideration for a person skilled in the art.

The board does also not agree with the argument that a person skilled in the art would have no incentive to consider the teachings in document D4 when starting from D1, because D4 relates to the same general technical field as D1 and the invention (i.e. paper manufacturing), and also to the relevant sub-field of coating applicators. The alleged differences between the devices in D1 and D4 are considered to be of little significance, and would in any case not prevent the skilled person from recognising that the advantages of using a composite material as proposed in D4 (light weight and lower costs) would also apply to the device in D1. In other words, since the use of a composite material in the module according to the invention is

basically associated with the known advantages of these materials (i.e. low cost, low weight and chemical stability) and not with any unexpected and/or synergistic effect within the specific context of the contested patent, there is no reason to disregard teachings which concern a similar device within the same technical field and which explicitly refer to the above cited advantages.

Finally, the board also considers that the teachings in D4 would lead the skilled person to use the composites disclosed therein in the application module of D1. While not explicitly indicated in the patent, it can be deduced from the reference to mobility problems of the module in paragraph [0004] that the composite material is used in the application module because this is the moving portion of the unit. An analogous teaching can be read in D4, which explicitly indicates (col. 1, lines 23-33, 41-50 and 59-60) that the use of composite materials reduces the weight of the moving parts of the applicator (i.e. in this case, the roll) therefore avoiding problems of unbalanced forces during rotation and providing a more lightweight and low-cost structure. D4 therefore provides a direct hint to use composite materials in the moving parts of the application unit of D1 to reduce their weight and to improve their mobility, which would thus lead the skilled person to use the composite material in the application module of D1. In any case and for the sake of completeness, the board also notes that using composite materials for their known advantages would be obvious regardless of where these materials are used, because using a known material in a particular part of a device simply for the sake of its known effects/ properties (rather than for an unexpected or synergistic effect obtained within the limited context

of that portion of the device) would simply represent an obvious choice among known alternatives.

The board therefore concludes that a person skilled in the art starting from the application unit in D1 and seeking to reduce the weight and the costs while also maintaining the chemical stability of the device would consult document D4 and, in view of its teachings, would consider using composite materials to construct the module without exercising inventive skills.

Consequently, even under the assumption that the problem formulated by the proprietor is successfully solved, the board agrees with the appellant in that the subject-matter of claim 1 is not inventive in view of D1 combined with the teachings of D4.

3. Since the opposition ground under Article 100(a) EPC in combination with Article 56 EPC prejudices the maintenance of the patent as granted and the patent proprietor has not submitted any auxiliary claims request, the opponent's appeal succeeds.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

A. Pinna J.-M. Schwaller

Decision electronically authenticated