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**Datasheet for the decision
of 11 November 2019**

Case Number: T 1181/16 - 3.3.06

Application Number: 06747848.7

Publication Number: 1885947

IPC: D21C9/06

Language of the proceedings: EN

Title of invention:

ARRANGEMENT FOR THE TREATMENT OF CELLULOSE PULP IN A WASHING
APPARATUS ARRANGED WITH A REINFORCING FRAME

Patent Proprietor:

Valmet Technologies, Inc.

Opponent:

Andritz Oy

Headword:

DD Washer/Valmet

Relevant legal provisions:

EPC Art. 54(2), 54(1), 56

Keyword:

Novelty - public prior use (no) - insufficient substantiation/
evidence

Inventive step - (yes)

Decisions cited:

Catchword:



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 1181/16 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 11 November 2019

Appellant: Andritz Oy
(Opponent) Tammasaarenkatu 1
00180 Helsinki (FI)

Representative: AWA Sweden AB
P.O. Box 45086
104 30 Stockholm (SE)

Respondent: Valmet Technologies, Inc.
(Patent Proprietor) P.O. Box 11
02151 Espoo (FI)

Representative: Maiwald Patent- und Rechtsanwaltsgesellschaft
mbH
Elisenhof
Elisenstraße 3
80335 München (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 18 March 2016
rejecting the opposition filed against European
patent No. 1885947 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman J.-M. Schwaller
Members: S. Arrojo
J. Hoppe

Summary of Facts and Submissions

I. This appeal concerns the decision of the opposition division to reject the opposition filed against European patent 1 885 947, claim 1 thereof reading:

"A washing apparatus for washing of cellulose pulp comprising:

a rotatable drum (2), provided with a number of outer compartments (4) for the paper pulp to be washed, which compartments are defined by axial compartment walls (6) and distributed along the circumference (12) of the drum,

a stationary support (14) having two opposite transverse beams (16), whereby the drum extends between the transverse beams and is rotatably journalled on both of the transverse beams of the support,

a stationary cylindrical casing (18), having two opposite gables, that encloses the drum, whereby an annular space (20) is defined between the casing and the drum,

a number of seals (22) that are arranged on the casing and that seals between the casing and the compartment walls of the compartments, such that the annular space is divided in a formation zone (F) for forming of the pulp in the compartments of the drum, at least one washing zone (T1, T2) for washing of the formed pulp at overpressure, and

a discharge zone (U) for discharge of the washed pulp from the annular space; and

at least a reinforcing frame rib (24), that is attached to the casing between the gables (19),
characterised in that *the reinforcing frame rib (24) extends around the entire casing (18) for fixing the casing in a predetermined form, whereby detrimental deformation of the casing (18) when washing the paper*

pulp in the pressurized spaces (F, T1, T2) is prevented, and that the casing (18) forms a longitudinal discharge opening (26), relatively the axial extension of the drum, for washed pulp that is discharged from the discharge zone (U), and where the reinforcing frame rib (24) extends straight across the discharge opening (26) of the casing."

- II. In the grounds of appeal, the opponent (from now on "the appellant") objected to this claim on lack of novelty in view of documents D4 (US 2005/0051473) and D18 (an alleged public prior use filed with the notice of opposition), as well as on lack of inventive step in view of document D4 combined with common general knowledge or with document D8 (DE 26 45 704), or in view of document D16 (presentation by Allen Turner submitted with the notice of opposition) combined with document D4.
- III. With letter dated 4 August 2017 the appellant submitted a new document (D22) and raised an additional objection under Article 56 EPC based on this document.
- IV. The Board issued a communication to inform the parties of its preliminary opinion that D22 should not be admitted into the proceedings and that the claims as granted appeared to comply with the requirements of Articles 54 and 56 EPC.
- V. During the oral proceedings, the appellant withdrew its request to admit document D22 into the proceedings (and the related objection) as well as the objections under Article 56 EPC based on the combinations of D4 with D8, or of D16 (as closest prior art) with D4. Concerning the objections under Article 54 EPC based on the prior

use D18, the appellant referred to its written submissions.

After closure of the debate, the requests of the parties were as follows:

The **appellant** requested to set aside the decision and to revoke the patent in its entirety.

The **respondent** (the patent proprietor) requested that the appeal be dismissed.

Reasons for the Decision

1. Prior use D18 - Public availability (Article 54(2) EPC)
 - 1.1 The appellant based a novelty objection on the alleged public prior use of a washing apparatus that was procured by Stora Enso Oy in Varkaus (Finland) from the opponent within a modernisation project managed by Mr Ville Varis. As regards public availability, the appellant did neither rely on nor submit facts and evidence of the procurement as such. Instead, it argued that during installation and start-up of the washing apparatus as well as thereafter, the apparatus had been available for inspection by persons visiting the plant of Stora Enso Oyj in Varkaus. It further stated that these visitors had not been bound by any secrecy agreement. Together with the notice of opposition the appellant submitted document D18 consisting of a declaration by Ville Varis, several drawings and a photo in support of an alleged public prior use of a washing apparatus ("Drum Displacer washer, DD-washer").
 - 1.2 According to this declaration, a device ("Drum Displacer washer, DD-washer DD3040.1,2MC") as shown in

the submitted drawings had been acquired by the company "Stora Enso Oyj" from "Andritz Oy" (i.e. the opponent and appellant). The acquisition was formalised with a contract dated February 10, 2003 and the machine was subsequently delivered to "Stora Enso Oyj" in 2003. Both during installation and "in the period from the start-up of the washer (September 2003)" the device was visited by "foreign guests of Andritz, subcontractors and different partners". The visitors were neither required to sign any confidentiality agreement, nor were they bound by secrecy.

1.3 The appellant based the alleged public prior use merely on the public availability of the "Drum Displacer washer" for the visitors of the plant of Stora Enso. However, in the present case it needed not to be decided whether the standard of "balance of probabilities" or the standard of proof "up-to-the-hilt" was to be applied, because not even the lower standard of proof was fulfilled.

1.4 In the present case, as already pointed out in its communication, the Board agrees with the opposition division in that a number of essential aspects of the alleged public prior use are neither substantiated nor proven with sufficient probability. In particular it is not substantiated:

- who visited the plant, since only a vague reference was made to "guests" of Stora Enso and Andritz, "sub-contractors" and "partners";
- when the public prior use took place, since the declaration merely indicates that the plant was visited "during the installation thereof and in the period from the start-up of the washer (September

2003)", without specifying the date of the alleged visits;

- how the material was made available to the public, since the declaration broadly refers to visits, without further specifying how these were conducted;
- what was made available to the public, because while it was explained that certain features were visible during installation and operation, not knowing how the visits were conducted and how the machine was presented implies that there is no way to determine which aspects were, in practice, made accessible to the public.

1.5 It is also noted that, in the absence of any further detail or evidence concerning the alleged visits (e.g. invitations, emails, etc.), the lack of implicit confidentiality agreement cannot be considered to be proven with a high probability. The question whether an implicit confidentiality agreement must be presumed to exist is a point of law which must be examined in the light of all the circumstances. For example, visitors within a business relation (in the case on file subcontractors and partners), are frequently bound by an implicit secrecy agreement. Therefore, the mere declaration of an employee, here Mr Varis, stating that no confidentially agreements were in place, is not sufficient. Rather, it would have been on the appellant to specify the persons and the circumstances of their visit.

1.6 Consequently, the Board concludes that the appellant has not provided sufficient facts and evidence to prove with sufficient probability that the device shown in

D18 was made available to the public under Article 54(2) EPC. This document can therefore not be taken into account for assessing novelty under Article 54(2) EPC.

2. Novelty

2.1 The ground under Article 100(a) EPC in relation to Article 54 EPC does not prejudice the maintenance of the patent as granted.

2.2 Document D4 discloses a rotating filter comprising a filter housing having a skeleton frame "made of a plurality of skeleton rings and skeleton rods running parallel to the axis of rotation between the skeleton rings", wherein in the simplest case "two terminal skeleton rings are provided" (par. [0030]). Figure 6 shows an end view of one side of the filter, wherein a terminal rib 116 is visible and appears to extend continuously around the entire casing. The cake removed from the filter can be ejected through an elongated discharge opening extending axially along the filter surface to an ejection compartment 64, 164 (figures 1 and 6; par. [0066], [0076] and [0086]).

2.3 The appellant referred to the rib 116 in figure 5 of D4 as well as to figures 1 and 6 and paragraphs [0030] and [0090] as indications that at least the terminal rings extended continuously around the casing. Since D4 referred to the possibility of having further (intermediate) skeleton rings between the end rings and since the word "ring" itself implied a closed form, it would be implicit that all the skeleton rings extended continuously around the entire casing and so implicitly also straight across the discharge opening, thereby rendering the subject-matter of claim 1 not novel.

2.4 The Board does not follow this argumentation because it is not apparent why the concept "ring" should necessarily imply that the ring is a closed one. For a person skilled in the art, the general concept "ring" encompasses both closed and open rings (i.e. the latter being a ring with a discontinuity), particularly in the case of document D4, where the cylindrical housing on which the skeleton rings are to be arranged includes itself a discontinuity in the form of an elongated opening to eject the filter cake.

The Board also considers that neither figures 5-6 nor any other part of D4 clearly shows the actual form of the intermediate skeleton ribs.

Consequently, there is no basis to argue that document D4 clearly and unambiguously discloses skeleton rings extending around the entire periphery of the casing and across the discharge opening.

2.5 The Board therefore concludes that the subject-matter of claim 1 as granted is novel in view of document D4.

3. Inventive step

3.1 The ground of opposition under Article 100(a) in relation to Article 56 EPC does not prejudice the maintenance of the patent as granted.

3.2 Closest prior art

In agreement with both parties, the Board considers D4 to represent the closest prior art, because this document discloses a device which is structurally similar to that of the underlying invention and makes explicit reference in paragraph [0030] to the use of

skeleton rings (i.e. ribs) supplemented by fillers to prevent pressure-induced deformations of the housing.

As shown above, the subject-matter of claim 1 differs from this document in that *"the reinforcing frame rib (24) extends around the entire casing" and "straight across the discharge opening (26) of the casing"*.

3.3 Problem solved

According to the patent in suit (par. [0006]), the object of the invention is to provide a washing apparatus that minimises the deformation in the pressurised part of the washing apparatus and at the same time has a lowered dead weight compared to known washing apparatuses, and that can be manufactured cost-efficiently and in a labour-saving way.

3.4 Success of the solution

As acknowledged by the appellant, the extension of the reinforcing rib around the entire casing and across the discharge opening plausibly gives rise to an improved resistance to pressure-induced deformations of the casing compared to ribs that extend only partially around the casing. It is however not apparent how, in the absence of further measures (e.g. discarding further support elements), the extension of the rib could reduce the dead weight or the costs of the apparatus.

The Board therefore concludes that the problem successfully solved by the invention should be limited to that of improving the resistance of the casing to pressure-induced deformations.

3.5 Obviousness

3.5.1 Document D4 (par. [0030]) explicitly refers to the use of a skeleton formed by rings, rods and fillers to provide a pressure-resistant housing.

3.5.2 The appellant argued that, in view of the explicit link in D4 between pressure resistance and the support skeleton, the skilled person would be prompted to find solutions to the underlying technical problem by modifying the support skeleton of the housing. In doing so, it would be apparent that the absence of supporting elements in the discharge opening was detrimental for the resistance to pressure-induced deformations. Since it would not be possible to arrange rods or fillers in this area (as they would block the discharge of the filter cake), the only alternative left would be that of extending the skeleton rib across the discharge opening to form a closed ring around the entire casing, thereby - using common general knowledge - arriving to the subject-matter of claim 1 without exercising inventive skills.

The appellant also referred to slide 9 of D16 (allegedly showing a plate arranged across an elongated outlet of a DD Washer) as an indication that there would be no prejudice for the skilled person to arrange plates or ribs across the discharge outlet.

3.5.3 The Board does not follow this argumentation.

While it might be accepted that modifying the skeleton would be an obvious alternative to improve the resistance to deformation of the housing, there is a wide variety of alternatives which could be considered for this purpose such as increasing the number and/or

the thickness of the ribs and/or rods, changing the material and/or the form of the skeleton, using additional supporting elements, etc.

Neither D4 itself nor any other cited prior art document provides any hint to the solution proposed in claim 1. In particular, the device in D16 is not considered to disclose reinforcement or support plates/ribs across the discharge outlet, because slide 9 is merely a drawing with no accompanying explanation, and the little information which might be derived therefrom (e.g. that the conveying screws are arranged to discharge the cake in opposite directions) actually indicates that the plate arranged in the outlet is not a supporting rib but a separation plate. In view of this conclusion, there is no need to decide on the question of public availability of document D16.

Since there is no one-way street situation and no specific hints (either in D4 or in the other prior art documents) pointing to the alternative solution of extending the ribs across the discharge opening, the Board considers that, while the skilled person could consider the solution proposed in claim 1, there would be no reason to select that specific solution among the multiple existing alternatives to solve the underlying technical problem. It is thus concluded that the only way to arrive at the claimed subject-matter is by exercising inventive skills or with the benefit of hindsight.

- 3.6 The Board therefore concludes that the subject-matter of claim 1 is inventive in view of document D4 combined with either common general knowledge or document D16.

- 3.7 Since the additional objections based on the combination of document D4 with the teachings of D8 and on the combination of D16 (as closest prior art) with D4 were explicitly withdrawn, there is no reason to deal with them in this decision.

4. The subject-matter of claim 1 and those of dependent claims 2-9 (all including the features of claim 1) therefore comply with the requirements of the EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



A. Pinna

J.-M. Schwaller

Decision electronically authenticated