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Datasheet for the decision of 31 October 2007

Case Number: T 1190/06 - 3.2.07

Application Number: 97944212.6

Publication Number: 0934129

IPC: B08B 3/02

Language of the proceedings: EN

Title of invention:
Method and device for cleaning a dirty surface

Patentee:
Compagno B.V.

Opponent:
Lechler GmbH & Co.KG

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 113(1)
EPC R. 68(2)

Keyword:
"Procedural violation (no)"
"Remittal to the first instance (no)"
"Reimbursement of the appeal fee (no)"
"Novelty: Main, first, second and third auxiliary requests (no)"
"Inventive step: Fourth, fifth and sixth auxiliary requests (no)"

Decisions cited:
G 0002/88

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1190/06 - 3.2.07

D E C I S I O N
of the Technical Board of Appeal 3.2.07
of 31 October 2007

Appellant: (Patent Proprietor)	Compagno B.V. Parkstraat 28 NL-9001 AT Grou (NL)
Representative:	Hooiveld, Arjen Jan Winfried Arnold & Speisma Sweelinckplein 1 NL-2517 GK Den Haag (NL)
Respondent: (Opponent)	Lechler GmbH & Co. KG Ulmer Straße 28 D-72555 Metzingen (DE)
Representative:	Patentanwälte Ruff, Wilhelm, Beier, Dauster & Partner Postfach 10 40 36 D-70035 Stuttgart (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted 20 June 2006 revoking European patent No. 0934129 pursuant to Article 102(1) EPC.**

Composition of the Board:

Chairman: H. Meinders
Members: K. Poalas
E. Dufrasne

Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the Opposition Division revoking European patent No. 0 934 129.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC on the grounds of lack of novelty (Article 54 EPC) and lack of inventive step (Article 56 EPC).

The Opposition Division found that the subject-matter of independent claim 22 of the main request and of independent claim 1 of the auxiliary request was not new.

III. The following documents of the opposition proceedings are relevant for the present decision:

D1: DE-U-94 04 305
D6: Catalogue "Die ganze Welt der Düsentechnik", Ausgabe 921, Fa. Lechler GmbH & Co.KG, KAT/10.92.

IV. Oral proceedings before the Board took place on 31 October 2007.

(a) The appellant requested that the decision under appeal be set aside and that the case be remitted to the first instance due to a substantial procedural violation, with reimbursement of the appeal fee. In the alternative, it requested that the opposition be rejected or that the patent be maintained on the basis of one of the auxiliary

requests 1 to 6, filed with letter dated 20 October 2006.

(b) The respondent (opponent) requested that the appeal be dismissed.

V. The independent claims 1 of the different requests read as follows:

Main request (claims as granted), first and second auxiliary requests

"A method for cleaning a dirty surface, wherein water is squirted against the dirty surface in order to wash away the dirt with the water, wherein the water and compressed air are mixed, after which the water is squirted against the dirty surface in a spray of droplets, characterized in that use is made of a nozzle device having coaxial bores, the upstream wider portion of which serving as a mixing chamber wherein the water and the compressed air are mixed and wherein the mixture obtained has an overpressure relative to the environment, and the downstream narrower portion of which acting as a fluid port".

Third auxiliary request

Claim 1 according to the main request with the addition of the expression "hitting said surface" at the end of the claim's preamble.

Fourth auxiliary request

Claim 1 according to the third auxiliary request with the following additional feature at the end of the characterising portion: "wherein the water is squirted against the surface in a spray of droplets, from a distance which is smaller than the distance at which the water becomes turbulent downstream of the nozzle".

Fifth auxiliary request

Claim 1 according to the fourth auxiliary request with the following additional features at the end of the characterising portion: "wherein pressurized water is supplied to the mixing chamber at a predetermined pressure, downstream of the nozzle, and wherein the water pressure can be regulated so steplessly".

Sixth auxiliary request

Claim 1 according to the fifth auxiliary request together with the following additional features at the end of the characterising portion: "said method being a method for cleaning hard surfaces, in particular facades of houses, industrial and commercial buildings, glass, plastics and metal, wherein the water pressure and the air pressure are set as follows:

water pressure (bar)	air pressure (bar, as an overpressure relative to the water pressure)
from 6 to 10	from 9.5 to 10 or from 10 to 15 or from 15 to 20".

VI. The appellant argued as follows:

(a) *Procedural violation, Article 113(1) EPC*

In its decision the Opposition Division states that since the device of D6 is usable for a method for cleaning dirty surfaces, **analogously** D6 discloses such a method and thus **inherently** reveals all claimed features of claim 1 as granted (emphasis added by the Board). This reasoning is clearly wrong in view of the Enlarged Board of Appeal decision G 2/88 (OJ EPO 1990, 9), stating in point 10.1 of the reasons that in assessing novelty the question to be decided is what has been "made available to the public", not what may have been "inherent" in what was made available to the public.

Furthermore, the appellant was not aware of the above mentioned Opposition Division's argumentation until said decision was received in writing. The appellant had no opportunity to comment on this new argumentation and was taken by surprise through the decision. Contrary to the principle of good faith governing the relations between the EPO and parties to proceedings before it, these opposition proceedings were not fair proceedings, as the appellant was deprived of the normal two instances before the EPO to present his case in full, also on this very important issue.

As the decision contains no reasoning whatsoever supporting the above mentioned statement, the decision was also deficient in this respect and

the appellant was adversely affected in his possibilities to motivate his grounds of appeal against the decision. This procedure was contrary to the principle of "equality of arms" governing relations between the EPO and parties to proceedings before it.

Therefore, due to this violation of the requirements of Article 113(1) and Rule 68(2) EPC the decision under appeal should be set aside and the case should be directly remitted to the department of first instance, with reimbursement of the appeal fee.

(b) *Main, first and second auxiliary requests - Claim 1: Novelty, Article 54 EPC*

D1 does not disclose a single nozzle device having coaxial bores, a separate mixing chamber connected to a water channel and to an air channel, whereby the downstream narrower portion of said device acts as a fluid port.

(c) *Third auxiliary request - Claim 1: Novelty, Article 54 EPC*

A hitting of the surface by the spray of droplets is not mentioned in D1.

(d) *Fourth auxiliary request - Claim 1: Inventive step, Article 56 EPC*

Having the surface to be cleaned at a distance which is smaller than the distance at which the

water becomes turbulent downstream of the nozzle is not known from D1. Keeping the nozzle device at such a distance results in an optimum impetus of the water droplets on the surface to be cleaned, thus improving the cleaning effect. Since such a distance is not known from D1 or from the other state of the art present in the file the skilled person has to apply an inventive activity in order to arrive at such a specific limitation of the distance.

(e) *Fifth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

In the present method, pressurized water is supplied to the mixing chamber at a predetermined pressure, downstream of the nozzle, wherein the water pressure can be regulated steplessly. These working conditions of the nozzle device allow the shape and the size of the water droplets to be well adapted to the cleaning purpose and the water/air ratio is well adapted to the grade of dirtiness and/or the material of the surface to be cleaned. Such working conditions are not known from the state of the art present in the file and the skilled person cannot arrive at such working conditions without exercising an inventive activity.

(f) *Sixth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

An unexpected low water pressure has turned out to be sufficient for effective cleaning of hard

surfaces, saving thereby water. No hint exists in the state of the art in the file towards the specific air and water pressure ranges mentioned in claim 1.

VII. The respondent argued as follows:

(a) *Procedural violation, Article 113(1) EPC*

D6 was filed together with the notice of opposition. In said notice *inter alia* the novelty of the subject-matter of the claims of the patent in suit was questioned. The appellant had therefore the opportunity to present its arguments concerning the explicit and/or inherent disclosure of D6 during the whole opposition proceedings.

Furthermore, during the oral proceedings before the Opposition Division, an intensive discussion directed to the structure of the nozzles shown in D6 and their applicability in cleaning extremely sensitive articles, for example electronic chips, took place. This discussion was therefore focused at the inherent disclosure of D6. "Inherent" is what the person skilled in the art recognises as being implicitly disclosed when reading the disclosure of D6.

The appellant's arguments in respect of a procedural violation committed by the Opposition Division are therefore not valid.

(b) *Main, first and second auxiliary requests - Claim 1: Novelty, Article 54 EPC*

D1 discloses a nozzle Ö for producing droplets in order to clean dirty surfaces using thereby less water, see lines 3 to 9 of the first paragraph of page 1. Water or liquids having as their main component water are used as cleaning liquids. Figure 2 shows two coaxial bores, provided by the water conduit R and the compressed air conduit ZG, see also page 2, second complete paragraph. Part A between the opening of the nozzle Ö and the opening of the internal conduit ZG defines a conical chamber or bore which has an upstream wider portion. At said upstream wider portion the water and the compressed air are mixed together. The mixture obtained exits from the opening of the nozzle Ö so that the downstream narrow portion of the nozzle acts as a fluid port as claimed. Furthermore, it is obvious that the mixture obtained has an overpressure relative to the environment because otherwise the mixture would not exit the nozzle. Finally, figure 2 shows a single nozzle connected to a water conduit R and an air conduit ZG. Figure 1 shows that water coming out from the nozzle Ö is squirted against the surface to be cleaned K. Accordingly, a method according to claim 1 is known from D1.

Therefore, the subject-matter of claim 1 is not new over the disclosure of D1.

(c) *Third auxiliary request -*
Claim 1: Novelty, Article 54 EPC

It is obvious that in order to clean the surface K of D1 the water droplets coming out from the nozzle Ö have to hit the surface.

(d) *Fourth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

It is obvious that the nozzle has to be positioned as near as possible to the surface to be cleaned so that the spray of droplets can effectively clean said surface. Therefore, in any case the distance has to be smaller than the distance at which the water becomes turbulent and thus ineffective.

(e) *Fifth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

A stepless regulation of the water pressure falls within the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance, namely a flexible and precise adaptation of the cleaning intensity of the spray of droplets exiting the nozzle to the dirtiness and the quality of the surface to be cleaned.

(f) *Sixth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

The additional features of claim 1 according to the sixth auxiliary request concern optimised values for water pressure and air pressure values for cleaning hard surfaces. These values are obtained through a trial and error process and allegedly improve the cleaning capacity of the nozzle. Since no surprising effect due to said pressure values has been mentioned in the application as originally filed, nor in the patent, these pressure values cannot support an inventive step.

Reasons for the Decision

1. *Procedural violation, Article 113(1) EPC*

1.1 Article 113(1) EPC reads as follows:
"The decisions of the European Patent Office may only be based on grounds or evidence on which the parties concerned have had an opportunity to present their comments".

Article 113(1) EPC ensures that the parties have the opportunity, during the proceedings, to present their comments on the grounds and evidence on which the subsequent decision will be based. In the case law of the boards of appeal "grounds or evidence" have been further developed, i.e. to mean the legal and factual framework which underpins the decision.

1.2 Rule 68(2) EPC provides that all decisions which are open to appeal are "to be reasoned". The reasoning should contain, in addition to the logical chain of facts and reasons on which every decision is based, at least some motivation on crucial points of dispute in order to give the parties a fair idea of why their submissions were not considered to be convincing.

1.3 Concerning the present case and taking into considerations points 1.1 and 1.2 above the Board comments as follows:

D6 was filed together with the notice of opposition in which reference was made to the nozzles disclosed therein, namely that they were constructionally comparable to the nozzle of claim 1 as granted. This was repeated in the opponent's letters of 16 July 2002 and 25 March 2003.

The Opposition Division, in its communication of 26 September 2002, already gave its preliminary opinion that the nozzle shown in D6 had all the structural features of the device claimed in claim 22 (erroneously referred to as claim 23) and was thus capable of carrying out the method according to claim 1, such as referred to in claim 22, the latter thus lacking novelty.

According to the minutes of the oral proceedings this particular issue was extensively discussed with both parties (see pages 1 and 2). The appellant therefore had sufficient opportunity during the whole opposition procedure to present its arguments concerning the explicit and/or inherent disclosure of D6. The fact

that the Opposition Division decided that the subject-matter of claim 1 as granted is not novel over the inherent disclosure of D6 thus cannot have taken the appellant by surprise since this was the main point of the novelty discussion during the opposition procedure.

1.4 The appellant appears to be of the opinion that the entire reasoning, as it will later appear in the Opposition Division's decision, will have to be made known to it in advance, so as to have compliance with Article 113(1) EPC. The Board cannot see a basis for that opinion in the EPC or in the case law. The procedure followed by the Opposition Division is the logical consequence of the fact that the EPO can only draw its final conclusions on the basis of the final submissions of the parties, and then articulates these conclusions in its decision. What counts is that the decision is not based on new "grounds or evidence", i.e. the essential legal and factual reasoning should not be new to the parties. In the present case both have been discussed extensively in respect of D6: lack of novelty, the identity of the structural features of the nozzle disclosed in D6 with the claimed nozzle features and the resulting inherent (i.e. directly "linked") capability of that nozzle to perform the claimed method/function. Furthermore, under point 4 of the grounds of its decision the Opposition Division presents its motivation as to why the appellant's submissions were not considered to be convincing. Therefore, the appellant's objection to a lack of reasons in the decision cannot be accepted.

1.5 The appellant has also not been deprived of the possibility of having its case examined by two instances because it was able to present its arguments concerning the disclosure of D6 and the issue of novelty before the Opposition Division (as is evident from the minutes of the oral proceedings before that instance) and it also has in the present procedure the possibility to present its arguments concerning the same issue to the Board.

1.6 The appellant referred to the Enlarged Board of Appeal decision G 2/88, point 10.1 of the reasons, arguing that the arguments presented in chapters 2.1.1 and 3.2.1 of the impugned decision were clearly wrong in view of that decision. The Opposition Division found that all features of the subject-matter of claim 22 of the patent in suit were **inherently** revealed by document D6, that the device of document D6 **inherently** was a device suitable for carrying out a method for cleaning dirty surfaces, that **analogously**, within the wording of independent method-claim 1 of the patent in dispute document D6 also disclosed that method and that document D6 also **inherently** revealed a method comprising all method features of the subject-matter of claim 1. G 2/88 (*supra*) presented guidelines for the evaluation a prior art's "inherent" disclosure. If the appellant had known of this reasoning it would have been able to react to it there and then. Now it could only do so in one instance.

The Board comments on this are the following.

Firstly, the question whether the argumentation line in respect of novelty as presented by the Opposition Division is, as alleged by the patentee, incorrect or not conform to the decision G 2/88 (*supra*) is not a matter of violation of procedural rules, but a matter of judgement of the department of first instance, for which an appeal is meant to be the remedy.

Secondly, decision G 2/88 (*supra*), in particular point 10.1 of the reasons, is related to a change of a claim for a "compound" (which as such was known) to a claim directed to the "use of that compound in a composition for a specified purpose" (the use being novel).
The question was whether the fact that the compound as such was known also implied that its use reflecting a new effect was known, this effect being inherent to the compound. In the present case this is not the point at issue, but the question whether, if all structural features of a claimed device are known, that device would be capable for the intended use as referred to. Claim 22 is a "product" claim, not a "use of the product" claim. The fact that the Opposition Division uses a term ("inherent") which has also been used by the Enlarged Board of Appeal in a different context, does not make both cases relate to the same issue.

In respect of the method claim of the patent in suit, it appears from the minutes of the oral proceedings before the Opposition Division that the position taken by it on the novelty of that claim's subject-matter followed as a consequence, as a result of the discussion of the method which the claimed device was

capable of performing. The minutes do not, however, give any reaction of the parties to this, i.e. either there was no reaction of the parties, or they were not given the possibility to react, or their reactions were not taken up in the minutes. In the first case, there is no basis for the appellant's objection, in the two other cases the appellant should have requested a chance to react (and have the refusal of that request minuted) or should have requested correction of the minutes. No evidence of such a reaction to the "surprise" exists in the file. It can, however, be expected of a party that it reacts at the appropriate moment, to such events, if and when they occur.

1.7 In view of the above, the Board can only conclude that in this respect no procedural violation took place during the opposition procedure, i.e. that the requirements of Article 113(1) EPC are met. Accordingly, the case need not be remitted to the department of first instance and the appeal fee need not be refunded.

2. *Main, first and second auxiliary requests - Claim 1: Novelty, Article 54 EPC*

Dl is directed to a so-called "ecological" nozzle Ö ("Ökodüse") used for pre-atomising ("Vorzerstäubung") of cleaning fluids R before they hit the contact surface K, see page 1, lines 1 to 3. According to page 1, lines 3 to 9 the objectives of D1 are increasing of the efficiency and effectiveness of the cleaning process, resulting in a reduction of the required amount of cooling or cleaning fluid. Given that the cleaning fluid to be used according to D1 is either water or has water as its main compound the

conclusion must be that D1 seeks to reduce the amount of water required for cleaning.

The above mentioned objective, which is identical with the objective of the patent in suit (see paragraphs [0003] and [0004]), is solved according to D1, second complete paragraph of page 3 in that in the interior of a nozzle Ö a separate inlet conduit ZG for a gaseous medium M, such as air or compressed air is foreseen in order to provide pre-atomising ("Vorzerstäubung") of the cleaning fluid R. As shown in figure 2 distance A between the outlet of the nozzle Ö and the outlet of the internal conduit ZG provides for a conical chamber in the nozzle Ö. Said conical chamber has an upstream (towards conduit ZG) wider portion. At said upstream wider portion water and compressed air are mixed together. The mixture obtained exits through the outlet of the nozzle, which means that the downstream narrow portion of the nozzle acts as the claimed fluid port. Furthermore, it is implicit that the mixture obtained has an overpressure relative to the environment because otherwise the mixture would not exit the nozzle.

The way of using the "ecological" nozzle Ö for cleaning a dirty surface K is described on page 2, lines 23 to 39 of D1. It is stated therein that cleaning fluid R, i.e. water according to one of the alternatives mentioned, together with compressed air M fed to the nozzle Ö. In the nozzle Ö a mixing of both media, i.e. of water and pressurised air takes place, said mixing resulting in a pre-atomising of the water R. The pre-atomised mixed medium in the form of very small water droplets ("sehr viel kleinen Flussigkeitspartikeln") is squirted against the surface K effecting a better

cleaning than the one provided through a conventionally bundled liquid jet. Moreover, the required amount of cleaning liquid is reduced, i.e. less water is required for achieving the same cleaning effect.

Thus, all method steps of, as well as the device features in, claim 1 of the main, first and second auxiliary requests are known from the method and device described in D1 and the subject-matter of claim 1 of said requests is therefore not novel (Article 54 EPC).

3. *Third auxiliary request - Claim 1: Novelty, Article 54 EPC*

Claim 1 according to the third auxiliary request differs from claim 1 according to the main request in that the expression "hitting said surface" has been added at the end of the claim's preamble.

On page 2, lines 31 to 35 of D1 it is stated that the pre-atomised mixture of air and water hits ("auftrifft") the surface K with very small water droplets achieving a better cleaning effect than conventionally bundled liquid jets, see also figure 1 of D1. Thus, also this feature is known from D1 and accordingly the subject-matter of claim 1 of the third auxiliary request is not novel either (Article 54 EPC).

4. *Fourth auxiliary request - Claim 1: Inventive step, Article 56 EPC*

Claim 1 according to the fourth auxiliary request differs from claim 1 according to the third auxiliary request in that "the water is squirted against the

surface in a spray of droplets, from a distance which is smaller than the distance at which the water becomes turbulent downstream of the nozzle".

Apart from the fact that after exiting the nozzle there are only water droplets in a stream of air, and not a stream of "water" for which "turbulent flow" could be determined, it is common ground between the parties that the formation of a cloud of droplets with the droplets "floating" in air, in all directions, is detrimental to the cleaning effect. The stream of droplets is no longer concentrated, their direction is not primarily towards the surface to be cleaned. This is the problem as mentioned in the patent in suit, paragraph [0011] and the feature in question is to be interpreted in that sense.

The solution to that problem is, however, obvious, namely regulating the setting of the nozzle such that the stream remains compact and hits the surface to be cleaned while it is still compact, i.e. holding the nozzle at the right distance. This solution is also suggested by D1, page 2, lines 31 to 35 and Figure 1, where the propelled stream of water droplets is compared with a conventionally concentrated stream ("konventionell gebündeltem Flussigkeitsstrahl") of water. That the effective distance between the nozzle and the dirty surface should be the distance within which the stream of water droplets remains compact, i.e. without any turbulence is the only logical choice.

Accordingly, the Board concludes that the skilled person seeking to have an effectively cleaning steam of water droplets would arrive at the claimed subject-

matter just by correctly applying the teaching of D1 on the basis of his own experience.

Therefore, the subject-matter of claim 1 of this request does not involve an inventive step (Article 56 EPC).

5. *Fifth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

Claim 1 according to the fifth auxiliary request differs from claim 1 according to the fourth auxiliary request in that "pressurized water is supplied to the mixing chamber at a predetermined pressure, downstream of the nozzle, and wherein the water pressure can be regulated so steplessly". According to the appellant the reference "downstream of the nozzle" relates to the location where the "predetermined pressure" of the pressurized water exists.

The Board notes that this expression, in exactly the same wording: "pressurized water is supplied to the mixing chamber at a predetermined pressure, downstream of the nozzle", was present in the application as originally filed, page 4, lines 9 to 13 and in claim 4 as well as in the patent in suit, paragraph [0008] and claim 6.

However, according to the invention as further discussed in the original application, pressurized water at a predetermined pressure is supplied to a mixing chamber through water channels 6, 17 and mixing takes place in the mixing chambers 12, 20, whereby both mixing chambers 12, 20 are upstream of the nozzles 1,

14, see figures 1 and 2; page 9, lines 6 to 33; page 10, lines 5 to 11. The only mention of a mixing chamber downstream of a nozzle is the chamber 22 of figure 2, however without any mention of a predetermined water pressure in the chamber. Having a predetermined "water pressure" downstream, i.e. outside of the nozzles 1 and 14 (even if that were possible in a stream of water droplets) finds no other basis in the application as originally filed.

The Board is first confronted with an amendment involving an originally disclosed feature which forms the subject-matter of a dependent claim as granted, which is contradictory in itself and inconsistent with the disclosure of the actual invention. In such a situation two possibilities exist: either the feature in question cannot be seen to have a limiting effect on the subject-matter claimed, or the Board gives the feature its proper meaning. In the present case, both lead to the same result.

Denying the feature any limiting effect has as a consequence that the objection of lack of inventive step raised against claim 1 of the preceding fourth auxiliary request applies also to this request.

Giving the feature its proper meaning the Board can only come to the conclusion that it has to read as follows: "pressurized water is supplied to the mixing chamber at a predetermined pressure, upstream of the nozzle", as no technical significance was attributed by the parties to the measuring of, or the definition of the water pressure outside of the nozzle, downstream in the stream of water droplets. However, that is exactly

what is happening in the nozzle of D1, where cleaning water R is directed to ("zugeführt") the mixing chamber. This has to be at a certain pressure, otherwise the air M cannot be "sucked in" ("selbstansaugend zugeleitet"), for instance. The Board further considers that the person skilled in the art seeking to provide effective cleaning of different types of surfaces with the device of D1 would obviously not work with a randomly chosen intensity, but at a predetermined pressure, adapted to the circumstances. In D1 this intensity is mentioned as a control of the energy employed ("durch den Einsatz von Zusatzenergie zu steigern, und das regelbar ...", see page 2, lines 3 to 5). Given the fact that it is common technical knowledge that there exist two equivalent possibilities for regulating the intensity of a liquid stream produced in a nozzle by mixing together pressurised water and pressurised air, namely to either regulate the water pressure or the air pressure provided to said nozzle, the Board regards the selection of one (a predetermined water pressure) out of these two well known equivalent alternatives as an activity which does not involve an inventive step.

It is further well known to the skilled person that there are two ways of regulating the water pressure, namely stepwise or stepless. The Board fails to see how the selection of a stepless regulation of the water pressure could support inventive step.

Therefore, the subject-matter of claim 1 of the fifth auxiliary request does not involve an inventive step (Article 56 EPC).

6. *Sixth auxiliary request -*
Claim 1: Inventive step, Article 56 EPC

The subject-matter of claim 1 according to the sixth auxiliary request differs from the subject-matter of claim 1 according to the fifth auxiliary request in that said method is a method for cleaning hard surfaces and in that specific water and air pressure ranges are claimed. The specific surfaces mentioned after the expression "in particular", namely facades of houses, industrial and commercial buildings, glass, plastics and metal, are only mentioned as optional and thus need not be taken into consideration when evaluating novelty or inventive step.

The Board considers that the feature concerning the use to which the method is put ("hard surfaces") cannot be seen as based on inventive activity. Cleaning such surfaces, like house facades, with standard water jets has been known for a long time, and thus the problem of saving water and minimising the soiled water existed in that field as well. Finally, the optimization of the water and air pressure for that purpose can be gained through a normal trial and error process, said last falling within the normal practice of the person skilled in the art.

The appellant argued for the first time during the oral proceedings before the Board that a surprising effect is achieved through the claimed ranges of values for the water and air pressure, namely that a good cleaning effect requiring thereby less cleaning water is obtained.

In the Board's view this argument is without any support in the application as originally filed, as no such surprising effect is mentioned therein. Further, there are no comparative tests showing such an effect when cleaning such "hard" surfaces, neither in that application, nor in any of the appellant's submissions. Finally, the water consumption is not only dependent on the water pressure but also on other parameters which interact with the water pressure, for example the air pressure and the dimensions of the mixing chamber and/or the bores used. For the latter no values are given in the claim (nor in the description for that matter), no supporting evidence having been supplied for the claimed water and air pressure ranges automatically resulting in a reduction of the required amount of cleaning water. This new argument presented by the appellant for the first time during the oral proceedings can therefore only be seen as a mere allegation.

For the above-mentioned reasons the Board concludes that the subject-matter of claim 1 of this request also does not involve an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Wolinski H. Meinders