Case Number: T 0722/01 - 3.4.2
Application Number: 93310340.0
Publication Number: 0604178
IPC: G01M 11/02

Language of the proceedings: EN

Title of invention:
Illumination system for ophthalmic lens inspection

Patentee:
JOHNSON & JOHNSON VISION PRODUCTS, INC.

Opponent:
Novartis AG, Patent- und Markenabteilung

Headword:
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Relevant legal provisions:
EPC Art. 123(2), 56, 111(1), 114(2)

Keyword:
"Deletion of features from claim 1: admissible amendment"
"Late-filed citations: admitted into the procedure"
"Remittal to the first instance for further prosecution"

Decisions cited:
-

Catchword:
-
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DE C I S I O N
of the Technical Board of Appeal 3.4.2
of 20 March 2003

Appellant: Novartis AG, Patent- und Markenabteilung
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Representative: Stellbrink, Axel
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Respondent: JOHNSON & JOHNSON VISION PRODUCTS, INC.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 20 April 2001 rejecting the opposition filed against European patent No. 0 604 178 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: E. Turrini
Members: A. G. Klein
V. Di Cerbo
I. The opposition filed against European patent No. 604 178 (application No. 93 310 340.0) and based upon the grounds under Article 100(a) and (c) EPC that the subject-matter of the patent was not new and did not involve an inventive step, and that its subject-matter extended beyond the application as originally filed, was rejected by the opposition division.

In its decision the opposition division made reference to the following documents:

NOV1: DE-A-41 23 554

NOV2: John Hedgecoe, "Fotografie für Könner", Christian Verlag, München, 1982

NOV3: Prospekt "Studiolicht-System E 1250/E 5000", Rollei, April 1974

NOV4: DE-A-24 31 156

NOV5: JP-A-63-21553 (original and English translation)


II. The appellant (opponent) lodged an appeal against the decision of the opposition division to reject the opposition.
With its statement of the grounds of appeal it filed the following additional citations:

NOV7: US-A-4 959 537

NOV8: DE-A-41 02 122


III. Oral proceedings were held on 20 March 2003 at the end of which the appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent (proprietor of the patent) as his main request requested that the appeal be dismissed.

Claim 1, the only independent claim of the set of claims as granted, which forms the basis of the respondent's main request, reads as follows:

"1. An illumination apparatus for use with an ophthalmic lens inspection system having wells for receiving one or more ophthalmic lens containers (38), a triggering means responsive to the presence of an ophthalmic lens container (38), a camera (10) with a variable focus lens (32) for capturing an image of the ophthalmic lens (40), means for determining the acceptability of the ophthalmic lens (40) from the camera image indicated by an electric signal, and an ophthalmic lens disposal mechanism connected to receive the signal related to ophthalmic lens (40)
acceptability and to separate an acceptable ophthalmic lens (40) from an unacceptable ophthalmic lens (40), said illumination apparatus comprises:

- a strobe lamp (50);
- an electrical power source (62) connected to said lamp (50) and connectable to said triggering means such that, in use, the power source (62) is electrically connected to the lamp (50) when the triggering means responds to the presence of a container (38);
- a reflector (54) surrounding at least a portion of the surface about the lamp (50) and having an opening (64) which, in use, is along the optical axis (48) from the lamp (50) to the camera (10);
- a diffuser (68) which, in use, is located between the lamp (50) and the ophthalmic lens container (38); and
- an aperture (46) which, in use, limits the cone angle of the light incident upon the ophthalmic lens container (38), the aperture (46) being located, in use, between the diffuser (68) and the ophthalmic lens container (38).

The respondent auxiliarily requested that the patent be maintained in amended form on the basis of any of the alternative sets of claims filed with the letter of 19 February 2003, of which each comprises a single independent claim 1 corresponding to claim 1 of the main request, with additional limitations.

IV. The appellant's arguments can be summarised as follows:

Claim 1 as granted no longer comprises the features which in claim 1 as originally filed were directed to a volume of liquid surrounding the lens in the lens container and to variation of the camera lens. There is...
however no indication in the original application documents that these features could be dispensed with and that the scope of protection as defined initially could be extended. Accordingly, in view of the strict standards to be applied in accordance with the case law of the boards of appeal, deletion from claim 1 of the above features offends against the provisions of Article 123(2) EPC.

The subject-matter of claim 1 is not patentable, in view in particular of the disclosure in the additional citations NOV7 to NOV9 submitted with the statement of the grounds of appeal.

These documents were discovered by accident. They had been opposed much earlier to the same respondent in an other opposition case. This other opposition case was being dealt with independently of the present case by different employees of the appellant's large company, and the documents had therefore remained unnoticed. Since they are highly relevant and since they were already known to the respondent, they should be admitted into the procedure.

NOV7 in particular discloses an illumination apparatus for the optical inspection of transparent containers (eg bottles) including all features indicated in claim 1 apart from the features related to the use with an ophthalmic lens inspection system, as recited in the upper part of claim 1, which do not limit the subject-matter of claim 1. This holds also for the reference to the triggering means in the lower part of claim 1. Therefore, the subject-matter of claim 1 is not new over NOV7.
The subject-matter of claim 1 also lacks novelty over document NOV8 related to a method of visually inspecting a moving web of translucent material.

The subject-matter of claim 1 in any case lacks an inventive step in that it can be derived in an obvious way from a mere combination of documents NOV7 or NOV8 with common general knowledge.

The subject-matter of claim 1 is obvious also in view of the documents already discussed in the opposition procedure. The illumination techniques disclosed in NOV2 or NOV3 are well-known to every amateur photographer, and their adaptation for use in an ophthalmic lens inspection system as known for instance from documents NOV4 or NOV6 is evident.

V. The respondent submitted that claim 1 of the main request did not offend against the provisions of Article 123(2) EPC because the features deleted from its version as originally filed were clearly not part of the claimed illumination apparatus and did not participate in solving the technical problem set out in the description. The deletion was required by the examining division under Article 84 EPC to improve clarity of the claim.

Documents NOV2 or NOV3 did not constitute suitable starting points for an attack under Article 56 EPC insofar as they related to photographic studio lighting which the skilled person, well aware of the difficulties in designing an illumination apparatus specifically adapted to the optical and mechanical constraints dictated by a specific inspection system, as evidenced by several consistent statements in document E2, would not readily take into consideration.
Documents NOV7 to NOV9 should be disregarded under Article 114(2) EPC as having been filed late. These documents had been known to the appellant even before the oral proceedings held in the opposition procedure and none of them was more relevant than the prior art timely filed by the appellant.

Documents NOV7 and NOV8 in particular respectively related to inspection of bottles and of a continuous web of photographic material. In view of the differences both in the size of the objects to be inspected and in the nature and extent of the defects to be identified, the skilled person striving at improving illumination in an ophthalmic lens inspection system would not have had any obvious reason to take any of these documents into consideration.

The respondent also stressed that the appellant had failed to give any detailed reasoning why patentability of the claimed subject matter of claim was questioned on the basis of document NOV9.

**Reasons for the Decision**

1. **The appeal is admissible.**

2. **Compliance of the amendments in claim 1 with the requirements of Article 123(2) EPC**

As compared to claim 1 as originally filed, claim 1 of the respondent's main request no longer comprises the two last paragraphs directed to a volume of liquid substantially surrounding the lens in the lens container and forming a lens having a positive optical
power and to the camera lens being varied to compensate for the positive optical power of the liquid in the lens container and to focus the lens image in the camera.

Claim 1 is directed to an "illumination apparatus" (see the designation of the invention at the beginning of the claim). Contrary to the other features which in claim 1 are defined as being comprised in the illumination apparatus, like the strobe lamp, the electrical power source, the reflector, the diffuser and the aperture, neither the volume of liquid substantially surrounding the lens in the lens container, nor the camera lens can reasonably be considered as forming part of the illumination apparatus, from which they are both physically and functionally independent as would be immediately recognised by the skilled reader.

Accordingly, deletion of the features relating to the liquid and to the camera lens from claim 1 as originally filed, as was correctly required by the examining division in the examining procedure to clarify the scope of claim 1, cannot be considered to have resulted in the patent containing subject-matter extending beyond the content of the application as filed and it does not therefore offend against the provisions of Article 123(2) EPC.

3. **Admissibility into the appeal procedure of the documents NOV7, NOV8 and NOV9**

3.1 Documents NOV7 to NOV9 were cited by the appellant for the first time with his statement of the grounds of appeal, i.e. long after expiry of the delay for filing an opposition. The respondent contested their admission
3.2 Indeed, in the board's view, the documents already considered by the opposition division cannot, either in isolation or in combination, call into question the patentability of the subject-matter of claim 1 of the respondent's main request.

Documents NOV2 and NOV3 are dedicated to photographic studio lighting using lamps combined with reflectors and diffuser screens in such a way as to provide artificial illumination of relatively broad scenes. The appellant could not convincingly demonstrate that the skilled person striving at designing an illumination apparatus suitable for an inspection system like an ophthalmic lenses inspection system would consider studio lighting equipment to constitute an adequate model. Moreover, the studio lighting equipments of documents NOV2 and NOV3 do not comprise any aperture between the diffuser and the object to be illuminated, limiting the cone angle of the light incident thereupon within the meaning of claim 1.

The other documents NOV1 and NOV4 to NOV6 disclose various ophthalmic lens inspection systems comprising each specifically adapted illumination means, replacement of which by the claimed combination of a probe lamp triggered by the presence of the object to be inspected, a reflector, a diffuser and an aperture would not make any technical sense.

The board in this respect entirely endorses the reasoning in paragraph 3 of the appealed decision, explaining why the opponent's various attacks against...
inventive step based on different combinations of the documents then before the opposition division could not succeed.

3.3 The appellant did not submit any reasoned statement in support of the relevance of late-filed document NOV9, which shall therefore be disregarded under Article 114(2) EPC.

3.4 Documents NOV7 and NOV8 are the only citations to disclose illumination apparatuses specifically and explicitly dedicated to direct optical radiation of desired intensity through objects to be inspected with a camera located on the other side of the object (see NOV7, Figure 1 and the second sentence of the abstract; NOV8, the Figure and the first sentence of the abstract).

The respondent did not deny the appellant's submission that the illumination apparatuses of documents NOV7 or NOV8 comprised most of the structural elements set out in claim 1 of the main request, but he submitted that they were not suitable for use with an ophthalmic lens inspection system within the meaning of the claim, because of substantial differences both in the size of, and in the nature and extent of the defects to be expected in, bottles or webs of photographic paper on the one hand and ophthalmic lenses on the other.

This line of argumentation did not convince the board. As a matter of fact, claim 1 of the respondent's main request does not specify that the ophthalmic lenses referred to therein are small contact lenses rather than larger spectacle glasses, as was correctly submitted by the appellant. Furthermore, if the nature and extent of the defects to be monitored may indeed determine the design and operation of the monitoring means, like the camera objective and the means for
processing the image signals it delivers, the function of the illumination means itself, which is to provide controlled diffuse illumination of the objects to be inspected, in such a way in particular as to prevent details of the illumination source itself from forming undesired artifacts (see column 3, lines 42 to 47 or column 4, lines 2 to 10 of the specification of the patent in suit), remains substantially the same.

3.5 For the above reasons, documents NOV7 and NOV8, which are considered a priori to be susceptible of leading to a different decision, should exceptionally be admitted into the procedure.

4. **Further prosecution**

Taking into consideration the new situation deriving from the admission into the procedure of late filed documents NOV7 and NOV8, which were not considered by the first instance, the board, in order not to deprive the parties of the possibility to have the issue considered by two instances, deems it appropriate to remit the case to the first instance for further prosecution, in particular for consideration of the impact of new citations NOV7 and NOV8 on the allowability of claim 1 of the main request (Article 111(1) EPC).

This course of procedure was accepted by both parties at the oral proceedings of 20 March 2003.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar: P. Martorana

The Chairman: E. Turrini