Datasheet for the decision
of 17 June 2015

Case Number: T 0160/14 - 3.2.02
Application Number: 06795096.4
Publication Number: 1906856
IPC: A61B18/20, H01S3/092
Language of the proceedings: EN

Title of invention:
FLASHLAMP CARTRIDGE FOR REMOVABLE CONNECTION TO A SOCKET

Patent Proprietor:
Eurofeedback

Opponent:
DERMEO

Headword:

Relevant legal provisions:
EPC Art. 54, 56, 100(a), 100(c), 111(1)

Keyword:
Added subject-matter (no)
Novelty - (yes)
Inventive step - (yes)

Decisions cited:
Catchword:
Case Number: T 0160/14 - 3.2.02

DECISION
of Technical Board of Appeal 3.2.02
of 17 June 2015

Appellant: Eurofeedback
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
21 January 2014 concerning maintenance of the
European Patent No. 1906836 in amended form.

Composition of the Board:
Chairman E. Dufrasne
Members: P. L. P. Weber
D. Ceccarelli
Summary of Facts and Submissions

I. The appeals of the patent proprietor and the opponent are directed against the decision of the Opposition Division, posted on 21 January 2014, finding that the patent as amended according to the first auxiliary request, and the invention to which it related, met the requirements of the European Patent Convention.

The notice of appeal of the appellant-patent proprietor was filed on 10 January 2014 and the appeal fee paid on the same day. The statement of the grounds of appeal was filed on 28 May 2014.

The notice of appeal of the appellant-opponent was filed on 27 March 2014 and the appeal fee paid on 25 March 2014. The statement of the grounds of appeal was filed on 28 May 2014.

II. In its reply (dated 3 October 2014) to the statement setting out the grounds of appeal of the appellant-patent proprietor, the appellant-opponent indicated which grounds for opposition in its view prejudiced the maintenance of the patent as granted. It further indicated that the arguments it had developed in its statement setting out the grounds of appeal on pages 9 to 18 in relation to claim 1 of the first auxiliary request considered allowable by the Opposition Division were applicable mutatis mutandis to claim 1 of the patent as granted.

III. With letter dated 4 March 2015, the Board summoned the parties to oral proceedings, indicating its provisional opinion in an annex to the summons.
IV. With letter dated 5 June 2015, the appellant-opponent informed the Board that it would not be present at the planned oral proceedings, but that it maintained the grounds and the arguments it had put forward in the written proceedings.

In the written proceedings the appellant-opponent requested that the decision under appeal be set aside and that the patent be revoked.

V. Oral proceedings were held on 17 June 2015.

In accordance with Rule 115(2) EPC and Article 15(3) RPBA, the oral proceedings were held in the absence of the appellant-opponent.

The appellant-patent proprietor requested that the decision under appeal be set aside and that the patent be maintained on the basis of the new main request filed during the oral proceedings or, in the alternative, that the appeal of the opponent be dismissed, or that the decision under appeal be set aside and that the patent be maintained on the basis of one of the auxiliary requests 2 to 15 filed with letter of 28 May 2014.

During the oral proceedings the main request on file was replaced by the "new main request" in which the word “preferably” was deleted from claim 21.

VI. The documents cited in the appeal proceedings are the following:

D1: WO-A-02/082866
D2: GB-A-2369057
D3: WO-A-03/043514
D4a: Barolet, Daniel, « Les soins au féminin », LeClinicien, janvier 2002, pages 63 to 73
D4b: “La dépilation sous un nouveau jour” SpaTouchRadiancy Inc., 2003
D4c: Radiancy SpaTouch, EC declaration of conformity,2002
D4d: State of Israel, Radiancy, SpaTouch, certificateof free sale, 2002
D4e: Radiancy Israel Ltd, 4 invoices for SpaTouch
D4f: Radiancy SpaTouch Manuel technique d’utilisation,Mars 2004, révision 9, 44 pages
D4g: Pictures of SpaTouch, 9 pages
D4h: Several copies of email exchanges
D5: GB-A-2360946
D6: Colder Products company, Coupleurs rapides pourconnaissances étanches, 5 pages
D7: Extract from the Merriam-Webster’s online dictionary, cartouche definition (filed by theappellant-patent proprietor with the statement settingout the grounds of appeal).

VII. The relevant claims according to the new main requestread as follows (deletion in claim 21 over grantedversion indicated by the Board):

"1. A flashlamp cartridge for insertion into a socket(20) of an IPL device (41), the socket (20) beingconnected to the IPL device via a flexible line or aloom of cables (45) which on the one hand makes itpossible to supply and remove water as a cooling fluidand on the other hand enables the electric supply, thecartridge comprising: a cartridge portion for aflashlamp (1); cooling device components for a coolingdevice (11, 12) for the flashlamp; thermal cartridge terminals (13) for the cooling device for thermallyconnecting the flashlamp cartridge to the socket (20)
and for supplying and/or removing water; and one or
more electrical cartridge terminals (14) for the
flashlamp for electrically connecting the flashlamp
cartridge (1) to the socket (20) the one or more
electrical cartridge terminals (14) are plug-type
connectors characterized by the fact that the thermal
cartridge terminals (13) are plug-type connectors
having the same plug-in direction as the one or more
electrical cartridge terminals (14)."

“17. A flashlamp assembly comprising a flashlamp
cartridge (10) according to one or more of claims 1 to
16; and a flashlamp (1) accommodated in the flashlamp
cartridge.”

“21. A socket for a flashlamp assembly, the assembly
including electrical and thermal cartridge terminals
for the flashlamp and being preferably formed according
to one or more of claims 17 to 19, comprising:
electrical socket terminals (24) for the flashlamp
cartridge; and thermal socket terminals (23) for the
flashlamp cartridge, and at least one valve means for
the water.”

“25. An electrical device comprising a basic device
(41) and a socket (20) according to claims 21 to 24.”

“33. A flashlamp assembly (10) adapted to be connected
to a base plate (20), comprising: a cartridge for
holding a flashlamp (1) according to any of claims 1 to
16; means for providing an electrical connection to the
lamp, said electrical connection means including a
quick release connection to the base plate (20); means
for providing fluid flow directed about the flashlamp,
said flow means including a quick release connection to
the base plate, said flow means being physically
separated from the electrical connection means, said flow means including cooling ducts; and a reflector forming a portion of the cooling ducts.”

VIII. The arguments of the appellant-opponent can be summarised as follows:

The subject-matter of claim 1 extended beyond the application as filed because the latter described only the flashlamp assembly, not the cartridge, as being insertable into the socket.

The subject-matter of claim 1 was not novel over D1 or D2.

D1 disclosed a flashlamp cartridge 5 for insertion into a socket 3 of an IPL device. It was clear that cartridge 5 was disconnectable from socket 3. In addition, D1 disclosed plug-in connectors 15A and 17 for the electrical connection and connectors 31, 33 for the cooling water circulation. These connectors also had the same plug-in direction. The wording of claim 1 did not require anything more.

D2 disclosed a cartridge including a plug 26 for electrical and cooling fluid connections for insertion into a socket on the control unit. This cartridge had all the features of claim 1, as acknowledged by the Opposition Division in the impugned decision.

In any case, the subject-matter of claim 1 was not inventive over D2 alone, D3 alone, the prior use SpaTouch alone, D1 and D2, D3 and D1 or D2, the prior use SpaTouch and D1 or D2.
Starting from the prior art according to D2 it was obvious to add a possibility of disconnection between the cable 14 and the head 12 in order to save money and avoid having to change the whole set each time another head was intended to be used.

Starting from D3 or the prior use SpaTouch it was obvious to choose water cooling when a better cooling was desired. In addition, these amendments were suggested by D1 or D2 which showed interchangeable cartridges including electrical and water cooling connectors.

IX. The arguments presented by the appellant-patent proprietor essentially correspond to the reasons of the present decision.

Reasons for the Decision

1. The appeals are admissible.

2. The invention is about a flashlamp and associated elements, more particularly the way they are constructed and assembled. Flashlamps are used in IPL (intense pulsed light) devices for medical and/or cosmetic applications to radiate light or other rays onto the skin of patients, in particular for epilation. Such flashlamps generate heat and need to be cooled, usually by liquid. One problem with prior-art flashlamps is that replacing the flashlamp is a very laborious operation which needs trained staff, inter alia because it is necessary to make sure that no cooling fluid leaks. The invention proposes to improve the construction and have a flashlamp cartridge with the lamp and connections for the electrical supply and cooling medium (water) supply, and a socket in which
the cartridge is fitted, the socket being connected with the rest of the IPL device through an appropriate cable connection.

3. The only difference between the new main request and the former main request, i.e. the patent as granted, is that the word “preferably” has been deleted from claim 21, so that all the objections not linked to the presence of this word in claim 21 raised by the appellant-opponent against the former main request apply to this new main request. In the following the Board will therefore only refer to the “main request”.

4. Claim 1 – added matter

The appellant-opponent considered that there was added subject-matter in claim 1 of the main request because the cartridge had not been presented in the application as filed as being insertable into the socket. Rather, it was the flashlamp assembly i.e. including the lamp which was stated to be insertable into the socket. Moreover, it was not inserted but connected.

In the opinion of the Board this argument is artificial, since the structure of the cartridge which allows the connection with the socket is not changed because the lamp is in the cartridge or not. This is straightforward for the person skilled in the art. In addition, as the Opposition Division mentioned, insertion of the cartridge is referred to on page 6, lines 16 to 21. Thus, the subject-matter of claim 1 does not extend beyond the content of the application as filed.
Therefore, the ground for opposition pursuant to Article 100(c) EPC does not prejudice the maintenance of the patent according to the main request.

5. Claim 1 – novelty

The appellant-opponent considered that D1 or D2 anticipated the subject-matter of claim 1.

5.1 D2 is about a high intensity light dermatological device which should be more versatile and allow the user to undertake a broad range of treatments. Accordingly, a plurality of treatment heads are selectively connectable to a control unit. Non-laser flashlamp treatment heads are mentioned to be usable (page 2, lines 3 to 5). A cable that conveys both an electrical supply and coolant to the treatment head is connected to the control unit. Water as cooling fluid is mentioned on page 6, second and third paragraphs.

Claim 1 requires that the flashlamp cartridge is for insertion into a socket of an IPL device, and that the socket is connected to the IPL device via a flexible line or a loom of cables. Hence, according to the wording of claim 1, the cartridge is not meant to include the flexible line or loom of cables for the connection to the IPL device. In the opinion of the Board, it follows that the subject-matter of claim 1 is novel over D2, at least because:
a) in D2 the element which is exchangeable is not the cartridge as required by claim 1 but the assembly constituted by the treatment head, the interconnecting cable and the plug (page 6, third paragraph),
b) although Figure 4 of D2 shows schematically some kind of connector arrangement and the connector arrangement is called “plug 26”, there is no detailed
description of any kind of connector used or usable, so that it cannot be considered to be directly and unambiguously disclosed that the plug-in direction is the same for the electrical and the thermal terminals, and not even that there are some plug-in terminals.

5.2 D1 describes a device with a flashlamp source for depilation or cosmetic treatment. The aim of the invention described there is to obtain a profile (tapered) of the device which allows the user to have a better view of the area to be treated. The device has a water cooling circuit (11, 31, 33) and electric connectors 17 for the lamp 13.

In the opinion of the Board, the subject-matter of claim 1 is novel over D1, at least because the device can be disassembled only into several individual parts, i.e. a cartridge cannot be defined. A cover 29 surrounds the lamp 13 and includes a gasket 30 obviously to prevent cooling liquid in chamber 11 from leaking. There is no indication whatsoever in this document that this cover 29 would be easy to disassemble together with the piece 27 and the lamp 13, thereby disconnecting the lamp and the fluid connections. Of course a deficient lamp must be replaceable, and this is why the cover 29 may be removed. This does not however mean that the cover is a cartridge or part of a cartridge. Apart from that, the nature of the fluid connections 31, 33 is not defined more precisely anyway.

5.3 For the reasons above, the ground for opposition pursuant to Article 100(a) EPC in conjunction with Article 54 EPC does not prejudice maintenance of the patent on the basis of claim 1 of the main request.
6. Claim 1 - inventive step

6.1 The appellant-opponent based its lack-of-inventive-step objection on several documents or combination of documents: D2 alone, D3 alone, SpaTouch alone, D1 + D2, D3 + D1/D2, SpaTouch + D1/D2.

6.2 According to the case law of the boards of appeal, the closest prior art to start from for assessing inventive step should be a device of the same type as that claimed. Therefore, in the opinion of the Board, as D1 and D2 do not disclose a cartridge within the meaning of the patent in suit they cannot be considered to be closest prior art for assessing inventive step.

6.3 D3 describes a flashlamp skin treatment device in which a "box body 11", i.e. a cartridge, is detachably mounted into a handset. The box body includes the lamp and filters and comprises connectors 34 for the electrical connection. There is also an air flow cooling system, in that there are openings 27 in the box body 11 and a pump in the machine body. To allow the air to flow from the openings 27 in the box body into the handset, a through-hole 22 is provided in the box body and a pneumatic fitting 44 with a seal 46 is provided on the handset side.

Hence, from among the cited documents only D3 discloses a cartridge, so that D3 must be considered the closest prior art for the cartridge according to claim 1.

From the above it follows that the subject-matter of claim 1 is novel over D3 because the cooling medium mentioned in claim 1 is water and not air, and the sole "thermal cartridge terminal" for the air is not a plug-type connector (only a raised edge pressed against a
seal) which thus can also not have the same plug-in direction as the electrical terminals.

The addition of a water cooling system and plug-in terminals to the body box and the handset of the device according to D3 would enhance the cooling function while maintaining easy connectability between the body box and the handset.

Hence, when starting from D3 the objective problem could be seen as to improve the cooling properties of the device while maintaining easy exchangeability of the body box.

However, replacing the air cooling system with a water cooling system goes against the teaching of D3. As a matter of fact, D3 specifically explains that water cooling is a drawback of the prior art (page 2, lines 8 to 13: “Conventional appliances feature complex lamp cooling systems (Peltier cells, water, etc.) and equally complex skin cooling systems (Peltier cell rings or plates, or water); and handset-skin interface gel must also be used. As a result, the handsets are heavy, unwieldy, and complex to make.”; “Disclosure of the invention”, page 3, lines 4 to 9: “At the same time, the appliance according to the present invention features an extremely straightforward, low-cost air cooling system, and an innovative, compact, easy-change box assembly housing all the component parts subject to wear.”).

Thus, in D3 the use of an air cooling system is an essential element of the invention. In other words, D3 teaches away from the invention claimed in claim 1 of the patent in suit. In such a case, even if the air cooling system of the device described in D3 might be
considered insufficient, the person skilled in the art starting from this document would try to improve the existing air cooling system or look for another way of cooling but would not revert to water cooling, which was considered disadvantageous.

For the reasons above, when starting from D3, the subject-matter of claim 1 of the main request is inventive.

6.4 The alleged prior use SpaTouch basically discloses the same kind of device as D3 (the plug-in connection for the air ducts is one more feature shown), and could therefore also be considered as closest prior art.

However, in the opinion of the Board the reasoning would be similar. SpaTouch is a rather small portable device in which the cooling system is based on air flow. Also in this case the presentation flyer D4b explains that in the known devices based on IPL technology significant cooling systems must be used (third page, paragraph “Lumière contre chaleur”), implying that with the LHE technology presented in the flyer this was not the case. The same is confirmed on page 5 in the paragraph “La technologie LHE de Radiancy...” explaining that since LHE technology dispenses with the need for an external filter and a complex cooling system the proposed system can be compact and portable. On the last page it is again mentioned that powerful cooling systems which make the machine heavier are not necessary. Hence, this document too teaches moving away from water cooling because of the complexity and the weight of a device incorporating such a cooling system. In addition, SpaTouch being a rather small portable device, it is not self-evident
that a water cooling system can be built in without losing portability.

For the reasons above, when starting from the prior use SpaTouch, the subject-matter of claim 1 of the main request is inventive.

That being the case, there is no need to examine whether or not the prior use SpaTouch was effectively made available to the public before the first priority date of the invention.

6.5 The other documents D1 and D2 cannot suggest anything else, since, as explained above, they do not disclose any cartridge in the sense of claim 1. If anything, at most D2, which uses a water cooling system (although without giving any precise information as to how this would be done), teaches to make an exchangeable assembly consisting of treatment head, cable and plug. This would not lead to building a water cooled exchangeable cartridge as claimed.

6.6 For the reasons above, the ground for opposition pursuant to Article 100(a) EPC in conjunction with Article 56 EPC does not prejudice maintenance of the patent on the basis of claim 1 of the main request.

7. Inventive step - other claims

According to its letter of reply dated 3 October 2014, the appellant-opponent did not present any objections against other claims than claim 1 of the patent as granted. It did, however, present objections against other claims of the first auxiliary request (considered allowable by the Opposition Division) in its statement setting out the grounds of appeal dated 28 May 2014.
Therefore the Board finds it appropriate to take position on those other claims in the following way.

7.1 The subject-matter of the other claims directly including at least the cartridge of claim 1 is inventive for at least the same reasons.

7.2 The only claim not directly including the cartridge of claim 1 is claim 21 referring to a socket. However, in the present wording this claim requires that the socket is for an assembly formed according to one or more of claims 17 to 19 and that it further comprises electrical socket terminals (24) for the flashlamp cartridge, and thermal socket terminals (23) for the flashlamp cartridge, and at least one valve means for the water. In other words, the socket according to claim 21 is a socket which is strictly adapted to cooperate with the flashlamp assembly according to claims 17 to 19, i.e. a flashlamp cartridge (10) according to one or more of claims 1 to 16 and a flashlamp (1) accommodated in the flashlamp cartridge. This means that it must be the “female” part comprising counterparts for the electrical socket and thermal socket plug-in terminals of the flashlamp assembly (being the “male” part). In addition, it must be provided with at least one valve means for the water, and the connections must be in the same direction.

Such a socket is not disclosed in any of the cited documents. Even if one considered that D2 disclosed implicitly some kind of socket at the very place where the plug 26 is to be connected to the control unit 10, such a socket would not be adapted for a flashlamp assembly according to claims 17 to 19, because such a hypothetical connection of such a flashlamp assembly with the control unit 10 at that very place would
result in a non-functioning machine, the flashlamp assembly being fixed on the control unit. In addition, nothing resembling a female connection for electrical and thermal socket terminals is disclosed in this document either, let alone that the connections should have the same plug-in direction.

The closest socket is that of D3, because it is adapted to receive a cartridge (the body box). However, the Board sees no reason, as already explained above in relation to the cartridge, why the person skilled in the art would depart from the teaching of D3 which is to eliminate any complicated water cooling system.

For the reasons above, the subject-matter of claim 21 is not obvious to the person skilled in the art pursuant to Article 56 EPC.

8. Hence, the patent as amended according to the new main request and the invention to which it relates meet the requirements of the EPC, so that the Board remits the case to the department of first instance pursuant to Article 111(1) EPC for maintenance of the patent in amended form on that basis.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of:
   
   - claims 1 to 35 of the new main request filed during the oral proceedings; and
   - the description and figures of the patent as granted.

The Registrar: The Chairman:

D. Hampe E. Dufrasne

Decision electronically authenticated