Case Number: T 0290/99 - 3.4.2
Application Number: 87202037.5
Publication Number: 0303740
IPC: G02B 6/44

Language of the proceedings: EN

Title of invention:
An assembly comprising a high voltage conductor and a fibre optic cable

Patentee:
FOCAS LIMITED

Opponent:
BICC Public Limited Company

Headword:
-

Relevant legal provisions:
EPC Art. 100(b)(c)

Keyword:
"Unallowable extension (no)"
"Sufficiency of disclosure (yes)"

Decisions cited:
G 0009/92, G 0004/93, T 0034/94

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.4.2
of 30 March 2000

Appellant: FOCAS LIMITED
(Proprietor of the patent) 16 St. Martin's-Le-Grand
London EC1A 4EJ (GB)

Representative: Baverstock, Michael George Douglas
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Decision under appeal: Interlocutory decision of the Opposition Division
de the European Patent Office posted 12 February
1999 concerning maintenance of European patent
No. 0 303 740 in amended form.

Composition of the Board:
Chairman: E. Turrini
Members: A. G. Klein
M. Lewenton
Summary of Facts and Submissions

I. European patent No. 0 303 740 was granted on the basis of European application No. 87 202 037.5, which itself was filed as a division of the earlier patent application No. 83 307 592.2 (publication No. 0 112 163).

II. An opposition founded on grounds under Article 100(a), (b) and (c) EPC was filed against the patent, and later withdrawn by the opponent.

III. The Opposition Division after the withdrawal of the opposition continued the procedure of its own motion and issued an interlocutory decision, in which it ruled that the patent could not be maintained as granted, on the ground that dependent claim 3, as considered in combination with claim 1 implied technical matter extending beyond the content of the originally filed documents. Claim 3, which in the granted version specifies that "the cable comprises an outer tubular member" in combination with the statements in claim 1 that the cable is located externally around a high voltage conductor and that it leaves the conductor at a given location from which it extends freely through the atmosphere to earth, was in particular held to extend beyond the disclosure in the original application documents of a cable being disposed within a tubular member only between the stress-controlling means and earth potential. From the original application documents it was also clear that the cable itself, as disposed along the conductor, did not include a tubular member (see point 2.1 of the Reasons).
Accordingly, the patent was maintained in an amended form, without dependent claim 3 as granted nor claim 4 directly appended thereto, and with a description so amended as to express that the embodiments comprising an external protective tubing for the cable between the stress-controlling means and earth potential did not fall within the scope of the claims.

IV. The appellant (proprietor of the patent) lodged an appeal against the interlocutory decision, requesting that the patent be maintained in amended form, with a set of claims corresponding in substance to the set allowed by the Opposition Division, but comprising again dependent claims 3 and 4 as granted, a dependent claim 10 also amended so as to correspond to dependent claim 12 as granted and an amended description.

Claim 1, the only independent claim of the set of claims in accordance with the appellant's request, and dependent claims 3, 4 and 10 read as follows:

"1. An assembly comprising a high voltage conductor (16,62,30) and a fibre optic cable (18,64) located externally along the conductor so that it is subject to the electrical field thereof, characterized in that said fibre optic cable leaves the conductor at a given location to extend freely through the atmosphere to earth, said fibre optic cable having a substantially non-tracking outer jacket (52), a non-metallic strengthening member, one or more fibre optic elements and a compatible protective filler, wherein the filler eliminates the existence of significant elongate voids within the cable, the jacket being made from
a material so as to carry any leakage current to earth, said assembly further comprising electrically-conductive stress control means at said given location and through which the fibre optic cable passes, said stress control means having an outlet through which the fibre optic cable leaves, to extend to earth, the fibre optic cable being spaced from the outlet so that any electrical stress on the fibre optic cable arising from the electric field produced by the conductor, is substantially insufficient to cause damage to the fibre optic cable.

3. An assembly according to Claim 1 or Claim 2, characterized in that the cable comprises an outer tubular member (22).

4. An assembly according to Claim 3, characterized in that the tubular member is convoluted, and/or has a shedded outer surface.

10. An assembly according to any preceding claim, characterised by a second stress control means (74 - Fig. 5) located on the fibre optic cable where the cable approaches or reaches a much lower potential than that at the conductor."

V. In support of his request, the appellant essentially submitted that there was a clear basis in the application documents as originally filed for a fibre optic cable taking one form as it is wound round the conductor and a second form, namely with a protective tubular member as shown for instance in Figure 6, as it leads through the atmosphere from the conductor to
earth. The claims were therefore consistent with, and supported by the application documents as originally filed.

**Reasons for the Decision**

1. The appeal meets the requirements of Articles 106 to 108 and Rule 64 EPC. It is admissible accordingly.

2. **Procedural matters**

The patent was maintained in an amended form by decision of the Opposition Division, and the patentee was the sole party to appeal against the decision.

According to the ruling of the Enlarged Board of Appeal in decisions G 9/92 and G 4/93 (both in OJ EPO, 1994, 875), if the patentee was sole appellant against an interlocutory decision maintaining his patent in amended form, the board of appeal cannot challenge maintenance of the patent as so amended.

The only independent claim in accordance with the appellant's present request and most of the dependent claims correspond to claims already considered allowable by the Opposition Division. Their allowability therefore is not an issue of the present procedure, because contesting it would amount to challenging also maintenance of the patent as amended by the Opposition Division.

For these reasons, the scope of the present appeal procedure is confined to examining the allowability of
those claims in accordance with the appellant's request, which have not yet been considered allowable by the Opposition Division, namely dependent claims 3 and 4 which had no counterpart in the set of claims allowed by the Opposition Division, and dependent claim 10 which as compared to the corresponding dependent claim 8 allowed by the Opposition Division no longer comprises the statement that the second stress control means defined there "acts as an earth leakage current collector".

3.  **Dependent claims 3 and 4**

3.1 Dependent claim 3 is directed to an assembly according to claim 1 or 2, characterised in that the cable comprises an "outer tubular member". Dependent claim 4 is directed to an assembly according to claim 3, characterised in that the tubular member is convoluted and/or has a shedded outer surface.

Claim 1 for its part specifies that the optic cable leaves the conductor to extend freely through the atmosphere to earth, and that it has a substantially non-tracking "outer jacket".

Thus, the "outer tubular member" of the cable as set out in claim 3, and which is convoluted and/or has a shedded outer surface as is set out in claim 4, when these claims are read in combination with claim 1 to which they are appended, can only consist in the "outer jacket" of the cable, which extends freely through the atmosphere from the conductor to earth.

Both the parent application and the divisional
application on which the present patent is based in the Board's opinion comprise embodiments in which the outer jacket of the cable is constituted by a tubular member, for example a heat-shrinkable sleeve internally sealed or adhered to the optical cable or a shedded jacket integrally formed about the cable (see the second paragraph of page 15, the paragraph bridging pages 20 and 21 and Figures 5a and 5b of the identical versions of the parent application and of the divisional application as originally filed).

The original application documents also acknowledge that such optical cable with an integrally formed shedded outer jacket was known in the prior art from document US-A-3 746 424, but in an assembly in which it did not extend externally of the conductor so as to be subject to its electric field (see the first paragraph on page 15).

For these reasons claims 3 and 4 as appended to claim 1 do not in the Board's opinion extend the subject-matter of the patent beyond the content of the divisional application or of the earlier application as filed, and the ground for opposition mentioned in Article 100(c) EPC does not prejudice their maintenance in the patent accordingly.

3.2 As far as claims 3 and 4 benefit from the same effective filing date as claim 1 to which they are appended, the patentability of their subject-matter directly follows from the patentability of the subject-matter of claim 1, which is not an issue in the present procedure (see point 2 supra).
Concerning claim 4, the opponent in his notice of opposition submitted that it could not benefit from the claimed priority date, since the priority applications did not disclose any shedded tubing. The claim therefore was anticipated by an alleged prior public use by the patentee's predecessor to the rights to the patent.

Following the withdrawal of his opposition, the opponent is no longer party to the proceedings. In view of the expectable difficulty of ascertaining the alleged prior use without the opponent's cooperation, the Board decides not to examine the facts of its own motion, in conformity with the established case law of the Boards of Appeal (see the decision T 34/94 referred to in the case law of the Boards of Appeal of the European Patent Office, 3rd Edition, page 475).

4. **Dependent claim 10**

4.1 Dependent claim 10, which corresponds to dependent claim 12 of the claims as granted, defines an assembly according to any preceding claims, characterised by a second stress control means (74—Figure 5) located on the fibre optic cable where the cable approaches or reaches a much lower potential than that at the conductor.

The opponent in his notice of opposition raised an objection against this claim under Article 100(b) EPC, submitting that the specification in conjunction with Figures 5 and 6 only showed an earthing clamp 74, the description failing to give any indication how such an earthing clamp 74 would act as a stress control means.
in addition to earthing the bottom of the optical cable.

In the Board's opinion, however, the housing 74, which is explicitly said in the description to serve as a stress control arrangement (see column 6, lines 7 to 12) clearly constitutes the "second stress control means" located at the lower potential end of the optical cable in the sense of claim 10, and it is illustrated in Figure 5 and described in the corresponding portion of the specification (see column 8, lines 14 to 40) in a sufficiently detailed manner to allow easy reproduction by the skilled person. The ground for opposition under Article 100(b) does not therefore prejudice maintenance of claim 10 in its present form.

The Opposition Division in this respect apparently insisted that the claim be amended to clarify that the second stress control means "acts as an earth leakage current collector". Lack of clarity under Article 84 is not however a ground for opposition, and such objection could be raised at the present stage of the appeal procedure only if the alleged lack of clarity resulted from amendments brought to the patent documents. This is not the case here since the present version of claim 10 is the same as that of claim 12 as granted.

4.2 The opponent in his notice of opposition suggested that the subject-matter of this dependent claim was also anticipated by the prior use already invoked in connection with claim 4. This question will not be investigated by the Board, for the reasons set out under point 3.2 supra.
5. Description

Finally, the description was amended to bring the statement of the invention in line with the amended claim 1, and to excise variants no longer covered by the claim, in particular those comprising a conductive outer jacket and those devoid of any protective filler.

As compared to the version of the description considered allowable by the Opposition Division the present version no longer comprises the statements that the assembly shown in Figure 3 did not fall within the scope of the claims and that Figure 6 was included for comparative purposes, which also suggested that the embodiment of Figure 6 was not in accordance with the invention.

In both embodiments, further mechanical protection is provided about the optic cable as it leaves the electrically-conductive stress control means (see column 7, lines 46 to 50). The Opposition Division contested that, in these embodiments, the fibre optic cable located externally along the conductor extended freely through the atmosphere to earth within the meaning of independent claim 1.

Assessment of the consistency of the description and claims, and thus of the compliance of the claims with the requirements of Article 84 and Rule 27(1)(c) EPC is indeed an important aspect of the examining procedure. The opposition procedure, in particular where withdrawal of the opposition leaves the proprietor of the patent as the only party, does not however constitute a continuation of the examination...
proceedings, offering a further opportunity to deal with issues which - like in the present instance - neither relate to grounds of opposition, nor result from amendments brought to the patent in order to overcome such grounds.

The Board therefore would not in the present circumstances insist on any further adaptation of the description under Article 84 EPC.

6. For the above reasons, the patent can be maintained in accordance with the appellant's request.

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 with the order of maintaining the patent in amended form with the following documents:

   Claims 1 to 10, columns 1 to 9 of the description and Figures 1 to 6, as annexed to the appellant's letter of 3 June 1999.

The Registrar: The Chairman: