DE C I S I O N
of 9 November 2000

Case Number: T 1137/98 - 3.5.2
Application Number: 94906314.3
Publication Number: 0683925
IPC: H01R 9/26

Language of the proceedings: EN

Title of invention:
Transmission line connectors and assemblies thereof

Patentee:
A.C. Egerton Limited

Opponent:
British Telecommunications plc

Headword:
-

Relevant legal provisions:
EPC Art. 56, 114(2), 115(1), 123(2)

Keyword:
"Added subject-matter - no (after amendment)"
"Inventive step - yes (after amendment)"
"Prior art documents filed on appeal (one admitted as relevant and responsive; the others not admitted"
"Third party observations - not relevant"

Decisions cited:
-

Catchword:
-
Case Number: T 1137/98 - 3.5.2

DECISION of the Technical Board of Appeal 3.5.2 of 9 November 2000

Appellant: A.C. Egerton Limited (Proprietor of the patent) Murray Road Leesons Hill Orpington Kent BR5 3QU (GB)

Representative: Downing, Michael Philip Fry Heath & Spence The Old College 53 High Street Horley Surrey RH6 7BN (GB)

Respondent: British Telecommunications plc 81 Newgate Street London EC1A 7AJ (GB)

Representative: Lidbetter, Timothy Guy Edwin BT Group Legal Services Intellectual Property Department 8th Floor, Holborn Centre 120 Holborn London EC1N 2TE (GB)


Composition of the Board:

Chairman: W. J. L. Wheeler
Members: R. G. O'Connell
          P. H. Mühlens
Summary of Facts and Submissions

I. This is an appeal by the proprietor against the interlocutory decision of the opposition division proposing to maintain European patent No. 683 925 in amended form.

The reason given in the decision under appeal for refusing the proprietor's request (third auxiliary request) ranking immediately above that granted (auxiliary request 3A) was that claim 1 of the former request included a negative feature not originally disclosed which would result in the patent containing subject-matter which extended beyond the content of the application as filed thus contravening Article 123(2) EPC.

The opponent also filed an appeal but withdrew it by letter dated 4 August 2000.

II. The following prior art documents considered in the first instance proceedings were referred to on appeal:

D1: WO-A-92/15129
D6: GB-A-2 129 630
D7: GB-A-2 135 530

D8: GB-A-2 176 062


In addition the opponent filed the following documents for the first time during the appeal proceedings:

D16: WO-A-91/07834

D17: US-A-4 676 568

D18: GB-A-2 013 423


D20: "Protection against overvoltage and overcurrent"
    Article by Dr. Robert Hoenl (1991)


III. During the course of the appeal proceedings a third party filed observations pursuant to Article 115(1) EPC.

IV. In a communication accompanying a summons to oral proceedings, the board indicated that the documents D17 to D21 appeared not to meet the criteria of relevance and responsiveness necessary to prevent their being disregarded as not being submitted in due time (Article 114(2) EPC). In particular it appeared that the opponent's argument based on these documents mosaiced features found in various ones of these five
documents with the teaching of documents D3 to D9 already on file.

The board also indicated that it had doubts about the permissibility of the claim amendment involving the previously undisclosed negative feature, which was not a classic prior art disclaimer.

V. Oral proceedings were held on 9 November 2000 at which the opponent, as foreshadowed in his letter dated 4 August 2000, was not represented.

The board decided pursuant to Article 114(2) EPC not to admit documents D17 to D21 to the proceedings, but to admit document D16 because of the relevance of the latter to the remote line-test function which was potentially crucial on the issue of inventive step. The proprietor assented to the admission of D16.

The appellant proprietor filed a single request including an amended claim 1 not involving the questionable negative feature.

VI. Claim 1 is now worded as follows:

"1. A kit of parts comprising;

(i) a transmission wire connector (20) including a first wire contact member (4) and a second wire contact member (7) mounted in a base unit (1) for making contact with an exchange linked wire (32), and a consumer linked wire (36), respectively, the first and second wire contact members (4, 7) within the base unit (1) being isolated one from the other, wherein the first and second wire
contact members (4, 7) are mounted in bores (5, 8) in the base unit (1) wherein the first and second contact members (4, 7) may slide to make said contact with the exchange linked wire (32) and the consumer linked wire (36), respectively;

(ii) a plurality of separable module units (14), each capable of coupling with the base unit (1) and providing direct or indirect electrical connection between the first and second contacts (4, 7) when that module unit (14) is coupled to the base unit (1),

the plurality of module units being arranged to provide different functions to the connector or a wire it connects, the different functions including at least:

(a) a direct connection and/or protection against excessive current and/or voltage

(b) an ability to respond to signals from the exchange of a test and/or control nature.

Claims 2 to 19 are dependent on claim 1.

VII. The appellant proprietor argued essentially as follows:

The plug 19 of the prior art document D1 provided different ranges of protection against overvoltage and/or overcurrent but not different functions in the strong sense of claim 1 of the opposed patent. It was necessary to guard against hindsight in reading pages 11 to 13 of D1; in particular it was important to appreciate that the plug 19 of D1 was a plug-in module
in a very limited sense. The present invention had extended this concept of a plug-in module in the context of transmission wire connectors by providing a level of functional modularity in such connectors which was radically different from that known from D1 or the common general knowledge in the art.

The prior art document D16 filed by the opponent with his statement of grounds of appeal showed only that it had been proposed to install devices to provide test functions such as "soft dial tone" at a distribution point before the priority date of the opposed patent. This was no more than was acknowledged in the application as filed; cf column 1, lines 43 to 52 of the patent specification. There was however no suggestion in D1, D16 or elsewhere that functions comprising an ability to respond to signals from the exchange of a test and/or control nature should be provided in the plug-in modules of a transmission wire connector in the same way as the known line protection functions.

As regards the feature in claim 1 of the opposed patent that the first and second wire contact members (4,7) are mounted in bores (5,8) in the base unit (1) wherein the first and second contact members (4,7) may slide to make said contact with the exchange linked wire (32) and the consumer linked wire (36), respectively, the argument at points 3.1 to 3.5 of the decision under appeal that the person skilled in the art, starting from D1, would find a solution to the problem of enhancing resistance to environmental degradation in prior art document D7, especially Fig 14, was a selection from the prior art based on hindsight. The latter disclosure related to an insulation displacement
connector making a contact to a conductive track on a printed circuit board – an application which was remote from the problem addressed by the invention of the opposed patent. By the same token, the opponent's contention on this point that the provision of a bore for slidable movement of the contact members was part of the common general knowledge in the transmission wire connector art as exemplified by prior art documents D2 to D7 failed to take account of the technical context. The fact that a feature was per se common general knowledge in the insulation displacement connector art did not necessarily imply that it was common general knowledge in the special technical context of a pole top distribution point with its particular environmental and service requirements.

VIII. The arguments of the opponent relevant to the current claims may be summarised as follows:

*Added subject matter (Article 123(2) EPC)*

Claim 1 required a "kit of parts", comprising a connector and a plurality of module units. Such a kit was neither disclosed nor claimed in the original specification; neither the word "kit" nor any synonym thereof occurred in the application as originally filed.

The passage at page 5 of the original specification cited by the opposition division at point 8.1 of the decision under appeal simply suggested that modules might be produced in a variety of colours denoting their function. There was no suggestion that these various modules be supplied with the connector as a "kit" – which in any case would be extremely wasteful.
The amended claim also raised a problem of interpretation of scope of protection in the event that only a module with known structure and function is used, the other module(s) being discarded.

**Inventive step**

Prior art document D16 disclosed a module having the capability referred to by the patent proprietor as "soft dial tone", i.e. a remote line-test facility to test a line which is not currently connected to a telephone. The unit described in D16 was described as being "left in place until such time as the pair is required for use"; cf D16, page 7, lines 7 to 10 and page 9, lines 15 to 19. Of the limited number of locations where it would be convenient to install such a device, one obvious place would be at the termination of the exchange wire pair, for example in a module of the type shown in D1. Hence a reading of D1 and D16 in conjunction would readily suggest that the line test function of D16 could be provided in a module of the type disclosed in D1.

As regards the feature that the conductors slide in bores the person skilled in the art would recognise that should the insulation displacement connectors be required to engage wire thick enough to cause such an unsupported insulation displacement connector to buckle a ready solution to this problem was to be found, e.g. in reference D7. In fact this arrangement was commonplace in the art as evidenced by prior art documents D2 to D6.

**IX.** The appellant proprietor requested that the decision under appeal be set aside and that the patent be...
maintained in amended form in the following version:

**Claims:**
1 as filed in the oral proceedings,
2 to 8(part) as in column 8 of the version maintained by the opposition division,
8(rest) to claim 19 as filed in the oral proceedings;

**Description:**
columns 1, 2 and 5 to 7 as maintained by the opposition division,
columns 3 and 4 as filed in the oral proceedings;

**Drawings:**
Figures 1 to 6(c) of the patent specification.

X. The opponent, who, as noted above, had withdrawn his own appeal, made no request in his capacity as respondent.

**Reasons for the Decision**

1. The proprietor's appeal is admissible.

2. **Permissibility of the amendments under Article 84, 123(2) and (3) EPC**

2.1 Kit of parts

The board confirms the finding of the opposition division that the present explicit claim to a kit of parts in claim 1 does not add subject-matter which extends beyond the content of the application as filed.
Although the term "kit of parts" was not used in the application as filed, the statement in the application as originally filed that the modules may be colour-coded to indicate their function, would, in the judgement of the board, be understood by the person skilled in the art, as envisaging, at least as an option, that a plurality of modules would be supplied with a connector. The board does not see the formulation of the claim in explicit "kit of parts" form as representing an increment of technical information relative to the original disclosure of the production of the connector and an associated plurality of optionally colour-coded plug-in function modules. By the same token the board takes the view that the natural interpretation of the phrase "there being provided a plurality of modules" in claim 1 of the published patent is that it claims, in substance if not in form, a kit of parts. The question of possible infringement by subcombinations of the kit is a matter for the national courts which does not impinge on the instant issue in relation to Articles 123(2), (3) and 84 EPC.

2.2 Undisclosed negative feature

In the current claim 1 the different functions provided by the plurality of separable module units are defined positively as:

(a) a direct connection and/or protection against excessive current and/or voltage

(b) an ability to respond to signals from the exchange of a test and/or control nature.
The first of these groups of functions is exemplified by the embodiments shown in Figures 5(a), (b) and (d) and the second group by the embodiments shown in Figures 5(c) and (e), the functions being described at column 5, line 55 to column 6, line 37 of the patent specification, the disclosure being identical in the originating PCT application as filed.

2.3 In the judgement of the board, the amended patent specification meets the requirements of Article 84, 123(2) and (3) EPC.

3. Novelty

The novelty of the subject-matter of the present claim 1 follows from the discussion below of inventive step.

4. Closest prior art, problem and solution

4.1 D1 is the undisputed closest prior art: it discloses a transmission wire connector which has the features specified in paragraph (i) of claim 1 prior to the "wherein" (first occurrence). The transmission wire connector specified within claim 1 differs from that known from D1 in that the first and second wire contact members (4,7) are mounted in bores (5,8) in the base unit (1) wherein the first and second contact members (4,7) may slide to make said contact with the exchange linked wire (32) and the consumer linked wire (36), respectively.

4.2 D1 also discloses a plurality of module units having the features specified in paragraph (ii) of claim 1 prior to subparagraph (b). The module units specified
within claim 1 differ from those known from D1 in that the functions they provide include at least an ability to respond to signals from the exchange of a test and/or control nature.

4.3 Relative to D1 the problem solved by the kit of parts claimed in the opposed patent is twofold: (i) to make the transmission wire connector more robust; (ii) to extend the functionality of the exchangeable module of D1. These two aspects of the problem are solved by the modifications identified immediately above.

5. **Inventive step**

5.1 The board agrees with the opponent's contention that the mounting of the first and second wire contact members (4,7) in bores (5,8) in the base unit (1) wherein the first and second contact members (4,7) may slide to make said contact with the exchange linked wire (32) and the consumer linked wire (36) would be obvious for the person skilled in the art in view of common general knowledge in the art as represented by D2 to D7. The proprietor's counterargument that those documents which disclose wire connectors, in particular insulation displacement connectors, with contact members sliding in bores would not be regarded by the skilled person as being relevant in the context of transmission wire connectors for use in the special environment of the top of a telephone pole - the so-called pole top distribution point (PTDP) - does not persuade the board since the claim is not limited to this location for the transmission wire connector; it could also be used in the protected environment of a street or building cabinet where insulation displacement wire connectors having contact members...
sliding in bores have undisputedly been widely used long before the priority date of the opposed patent. In this respect the board confirms the finding of the opposition division, albeit on a different reasoning - common general knowledge in the art rather than combination of D1 with a specific document.

5.2 However, as regards the enhanced functionality of the plug-in module units, the board agrees with the proprietor's contention that the formulation of this problem was not obvious for the person skilled in the art. The evidence is that at the priority date of the opposed patent the prevailing view in the art was that the functions of overcurrent and overvoltage protection were regarded as being in a different category to the functions of testing and control and that although such devices might be co-located on a pole top, breaking through the category barrier and providing these qualitatively different functions in exchangeable modules of the transmission wire connector was not an obvious step.

5.3 Since the opponent, who had withdrawn his own appeal, was not represented at the oral proceedings at which the current claim 1 was filed he has effectively waived his right to an opportunity to comment on this claim. Those arguments he submitted in his statement of grounds of appeal have been taken into account in the board's consideration of inventive step above to the extent that they are applicable to the amended claim.

5.4 Therefore, the subject-matter of claim 1 is considered as involving an inventive step within the meaning of Article 56 EPC.
6. **Observations filed pursuant to Article 115(1) EPC**

The prior art documents and the arguments based thereon filed as third party observations pursuant to Article 115(1) EPC are less relevant than the documents and arguments already on file and will therefore not be commented on by the board.

7. The description and dependent claims have been adapted to the present claim 1. The prior art according to D1 was already acknowledged in the description of the patent as granted.

8. The board judges that, taking into consideration the amendments made by the proprietor, the patent and the invention to which it relates meet the requirements of the EPC.

**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 in amended form in the following version:

   **Claims:** 1 as filed in the oral proceedings, 2 to 8(part) as in column 8 of the version maintained by the opposition division, 8(rest) to claim 19 as filed in the oral
proceedings;

**Description:** columns 1, 2 and 5 to 7 as maintained by the opposition division, columns 3 and 4 as filed in the oral proceedings;

**Drawings:** Figures 1 to 6(c) of the patent specification.

The Registrar: M. Hörmell

The Chairman: W. J. L. Wheeler