

BLO/099/88

PATENTS ACT 1977

IN THE MATTER OF an application
for letters Patent 8624470 (Serial
Number 2182503) by Barry Peter
Liversidge

DECISION

The present application was lodged on 13th October 1986 as a
divisional application on 8501338 (Serial No 2153157) claiming
the filing date of 18th January 1985. The specification
accompanying the application was an exact copy of the parent
specification and as all the requirements of Sect.15(4) were met
the filing was allowed to proceed.

The application was published on 13th May 1987 under Serial No
2182503 and included amended claims which were filed on
31st October 1986 in accordance with Section 16(1).

The Examiner reported under Section 18(3), in the Official letter
dated 23 January 1987, that the claims filed on 31st October 1986
were not supported by the description and thus the application
did not comply with Section 14(5)(c). The Examiner repeated the
objection of lack of support in the official letters dated
23rd September 1987 and 11th March 1988 following responses from
the applicants' Agent contesting the objection but offering no
amendments to try and resolve it.

In view of this the matter came before me at a hearing on 14th
June 1988 where Mr R Pumfrey instructed by Mr F Gillam of
Sanderson & Co (Agents for the applicant) appeared for the
applicant. The applicant Mr B P Liversidge and Mr J L Freeman,
the examiner in the case, also were present.

The application in suit relates to a cable stripping tool
particularly used for preparing the ends of a coaxial cable which

tool is dedicated to a particular size of cable since it has a body with a bore in it which fits closely around the cable to be stripped. The tool essentially consists of two parts a body portion and a blade carrier portion which are held together by resilient means comprising, in the embodiment described, a rubber band engaged around the interengaged body and carrier portions. The blade is pivoted on the carrier portion for limited angular movement so that it can extend into the bore in the body portion by different extents when moved from one extreme position to the other, in operation such movement is achieved by rotating the tool around the cable.

The procedure adopted for stripping a co-axial cable involves the following steps:-

- 1 Retracting the carrier portion and passing the cable through the bore the required distance.
- 2 Releasing the carrier portion and rotating the tool in a first direction such that a deep cut is obtained which severs the outer insulation, outer conductor and partially severs the inner insulation.
- 3 Twisting and pulling the projecting portion to completely sever the inner insulation and expose the inner conductor.
- 4 Retracting the carrier portion and moving the tool axially a required distance from the first cut.
- 5 Releasing the carrier portion and rotating the tool in the first direction to make a further deep cut.
- 6 Retracting the carrier portion and moving the tool axially a required distance and releasing the carrier portion.
- 7 Rotating the tool in the direction opposite to the first direction to make a shallow cut.
- 8 Pulling the tool axially from the cable to strip away the outer insulation and part of the outer conductor.

The body of the tool could be provided with guide piece projections which act as indexes to allow the free end of the cable and the cuts to be repeatedly accurately positioned. It is made clear in the description that the tool may be used to strip

layers from multi-layered elongate members other than electrical co-axial cables such as fibre optic cables.

Mr Pumfrey opened by taking me through Sections 69 and 76 of the Patents Act 1977 and explaining that these sections allowed for broadening of claims during the prosecution of an application as long as there was no explicit or implicit addition of subject matter. The terms of Section 69 were such that the public interest was safeguarded when such broadening occurred. I accept that this is the case but amended claims must be supported by the description as well as not adding subject matter.

Turning now to the application in suit Mr Pumfrey explained that the description contemplated both a tool for stripping cable and also a method for stripping cable and the purpose of the present application was to provide protection for the method. In his submission he considered that the description of the problems associated with stripping a co-axial cable showed that there was a need both for a new tool and a new method and this new method was described independently of the tool to be used on page 2 lines 25-50 of the printed specification "A first deep cut is made adjacent to the end of the cable by rotating the tool around the cable in the appropriate sense, whereafter the severed outer layers are rotated around the core with respect to the remainder of the cable, so completely separating the first layer whilst leaving the core intact. The tool is then moved further on the cable, and a second deep cut made. Next the tool is moved yet further on the cable and a third cut made, but this time by rotating the tool in the opposite sense so causing the blade to move to its other position and so effecting a shallow cut through the outer layer only. Preparation is completed by pulling the tool off the cable whilst leaving the blade in the third cut, which action slides the severed layers off the end portion of the cable, so successively exposing the conducting second layer, the first insulating layer and the conducting core. The above-described method is described in greater detail and also claimed in my co-pending British Patent Application Serial

No. 2,153,158 (Application No. 85-01339), filed 18th January 1985 and entitled "Co-axial Cable End Portion Preparation".

Mr Pumfrey argued that the content of the copending application should be included as part of the disclosure of the present application insofar as it gave more details of the method used as expressed in claim 1 of copending application 2153158 as follows: "A method of preparing the end portion of an elongate member having a core and at least three coaxial layers therearound so as successively to expose the core and layers from the end of the member, which method comprises:

- a) effecting a first cut around the member at a position adjacent but spaced from the end of the member to a depth sufficient partially to sever the layer immediately overlying the core;
- b) twisting the so-severed layers around the core so as to complete separation of the end portion of the layer immediately overlying the core from the major portion thereof;
- c) effecting a second cut around the member at a position spaced further from the end of the member than the first cut and to the same depth as was effected the first cut;
- d) effecting a third cut around the member at a position spaced further from the end of the member than the second cut but to a lesser depth sufficient at least partially to sever the third layer overlying the second layer but not to sever that second layer;
- c) applying axially of the member and in the direction of the end thereof a force to the severed portion of the third layer at or immediately adjacent the third cut thereby to strip from the member successively from the third cut the third layer, the second layer and the first layer, so leaving an exposed length of the core at the end of the member."

I agree with Counsel that, in principle, there would be no objection to a method claim but such claim would need to reflect the disclosure in the specification and also not conflict with the claims of the co-pending case 2153158.

Turning now to the amended claims filed on 31st October 1986, these consisted of a series of method claims 1 - 11 including an omnibus claim, an independent claim 12 to a tool and further claims 13 and 14 appendant to claim 12.

The first part of the submission centered on the main method claim which reads as follows.

1 A method of preparing the end portion of a co-axial cable using a tool having a bore for receiving the cable which bore extends through the tool from a face thereof, the tool further having a cutting blade arranged to cut into a cable located within the bore, and having a guide piece up-standing from said face of the tool, which method includes the steps of:
retracting the cutting blade from the bore;
passing the cable through the bore to project from said face of the tool;
moving the cutting blade to a cable-cutting position and effecting a first annular cut into the cable by rotating the tool around the cable;
retracting the cutting blade from the bore;
advancing the cable further through the bore until the first annular cut is aligned with a graduation or other index of the guide piece; and
moving the cutting blade to a cable-cutting position and effecting a second annular cut into the cable by rotating the tool around the cable.

In his submission about the above claim Counsel said; "I can see objection to this (claim) on the ground of basis and possibly also of sufficiency. It is on the footing of what I would consider to be utility, - -, in that you have got to get the relevant depths of cut right so far as the method is concerned:

but that is a completely different point from the question of support." He then continued by emphasising that the important cuts were the final two since these had to be accurate in order to fit the connector being used. He suggested that it was odd if a specification totally anticipated a claim and yet would not be considered to support that claim but continued by admitting this might not be the case where there were unambiguous indications in the specification of exactly what the inventor intended. He then considered various reported cases and concluded that where an essential feature of a claim was omitted the resulting claim could be considered as unsupported.

It seems appropriate now to consider the submissions made to me about the other independent amended claim which reads as follows.

12. A tool for preparing the end portion of a co-axial cable, which tool comprises a body defining a bore in which may be received the cable to be prepared, a cutting blade mounted on a carrier itself mounted on the body for movement with respect to the body so that the cutting blade may be moved towards and away from the bore whereby a cable located within the bore may be cut by the blade upon rotation of the tool around the cable, a resilient bias acting between the tool body and the carrier to urge the blade towards a cable-cutting position, and guide means adapted to assist the positioning of a cable within the bore prior to a cut being made into the cable, the guide means comprising a projection from the tool body adjacent the bore therein and having graduations or other indexes for alignment with the cable end or an annular cut already formed in the cable.

In conjunction with the analysis of this claim I drew Mr Pumfrey's attention to the statement of object on page 1 lines 83-94 of the printed specification which states it is an object of this invention to provide a tool suitable for preparing the end portion of an elongate multi-layer member and specifically an electric co-axial cable, which tool is very simple to use and yet is able reliably and consistently to cut

selectively through either only an outer layer (e.g. the outer insulating layer of a co-axial cable) or more than just the outer layer (e.g. the outer insulating layer the outer conductor and the inner insulating layer of a co-axial cable, without also cutting the inner conductor). I pointed out that there was a need for the tool of the amended claim to fulfil these objectives.

In replying to this Counsel said "I entirely accept that the tool (described) is able reliably and consistently to cut selectively (to two different depths). The point here is a point which when related to the method claim may well have an impact on the width of the method claim as presently proposed; that is to say, it is obviously the case that in the method the cuts must be made reliably to the requisite depth. You will remember that this is what I indicated to you in opening caused me a little problem with the width of claim as it presently stands because the depths of cut may go the whole way". He then continued by saying that the use of the word selectively in the object of the invention passage meant that the tool must be capable of doing both a shallow cut and a deep cut although it was for the operator to choose. He agreed that "so far as the claim 12 is concerned it does not, as presently constituted, offer that selective feature in quite that way" and considered that this objection could be overcome by detailed amendment of the claim.

In conclusion Counsel stressed that the specification had to be looked at as a whole taking note of the inventor's actual intentions but without inferring what the inventor might have meant. If looked at in this way then clearly a broad method had been described and thus could be claimed and such claim would not lack support or add subject matter. In his opinion if claims along the lines now proposed had been present in the parent specification on filing no objection would have been raised. It was also his opinion that some amendment was needed in both the independent claims, but this was detailed clarification and not substantial.

On the general issue I am inclined to agree with Counsel that a method has been described within the specification and thus a claim to the method is not inappropriate but such a claim would have to be carefully constructed not to be of the same scope as that of 2153158 and also to reflect the 'invention' of the disclosure made in the present application. It is not clear to me however that the method can be considered in total isolation from the actual construction and operation of the particular tool because it requires the use of a tool having a cable receiving bore, retractable carrier supporting a blade and an upstanding guide (gauge), which tool is rotated around the cable to provide the annular cuts.

Taking the same approach as the Hearing Officer in Glatt's Application [1983]RPC 122 I am of the opinion that the meaning of the term "support" used in the 1977 Act is closely akin to the concept of fair basis enshrined in the 1949 Act and one must look for clear pointers towards a specific inventive concept. In Van de Lely v Ruston [1985]RPC 21 on page 462, Oliver and Neill LJ are quoted on fair basis "the invention claimed must in fairness to the public be only that which the inventor had disclosed as his invention and which dealt with any problem with which the invention was intended to deal." From this statement I would understand that one must look also at the objects of the invention and the problems which it seeks to overcome in order to see whether the requirements of Section 14(5)(c) are met.

Considering first in some detail the amended method claim it only includes a requirement that two cuts are made in the cable and this means that steps 2, 3 and 4 of the procedure detailed on page 2 of this decision are omitted and I need to see that there is a basis in the specification for this. I am of the opinion that a broad basis is supplied by the following passage "The arrangement of the tool is such that when it is desired to expose the inner conductor of a coaxial cable, the tool is suitably positioned on the cable and is rotated therearound in one sense,

whereby frictional drag on the blade causes the blade to move to its first limiting position and so severing all the layers over the core conductor though the layer immediately overlying the core may only partially be severed radially. Then the tool is again suitably positioned on the cable at the point where the outer conductor is to be exposed, and the tool is moved therearound in the opposite sense, so causing the blade to move to its other position where the cutting edge severs only the outer insulating layer. Stripping of the severed layers may thereafter easily be accomplished," presumably by pulling the tool axially from the cable.

The method follows the procedure laid down on page 2 of this decision but does not specify that the first cut is a deep one and the second cut is a shallow one or give any indication as to how these specific cuts are achieved when the tool is rotated around the cable. It would seem to me that at least the depths of cut have to be specified for the claim to have any clear meaning at all. Counsel agreed that amendment was needed in amended claim 1 but no amendment had been proposed prior to or at the hearing. Clearly the application cannot proceed further without such amendment regardless of the main issue as to whether the claims are supported.

The amended claim to the tool (claim 12) also remains totally silent regarding the depths of cut that are needed or any construction that could achieve these necessary depths of cut reliably and consistently but concentrates on the provision of the guide means used to measure the distance between the cuts.

Counsel stressed that I have to look for "unambiguous indications in the specification of the inventors intent" which agrees in my understanding with the requirements for fair basis quoted above. My further understanding is that I must look at the objects and advantages the invention provides with the eye of the skilled man to see the real advance in the art that is being proposed.

The specification also comments adversely about prior methods taking a considerable time and often accidentally 'nicking' the conductors and explains these problems are overcome by the tool specified in the object of the invention which is found on pages 6 and 7 supra.

From these statements, in my opinion, the skilled man would comprehend that the 'invention' lay in providing a speedy method of cutting the insulation of a cable where the depth of cut was readily selectable and controlled so that danger of 'nicking' was avoided. The tool also needs to be simple to use and I must look to see whether these advantages or features are present in the amended claims if these claims are to find the necessary support.

As has already been said in respect of both the amended method claim 1 and tool claim 12 there is no mention of the depths of cut needed nor how these are selected so that reliable and consistent cutting is obtained in a simple manner. Equally no mention is made in the tool claim of the way in which the blade is mounted to achieve these requirements. In my opinion the statement that the tool is "very simple to use and yet is able reliably and consistently to cut selectively" imposes extra requirements on both the method and tool in that not only must the depth of cut be selectable but it must also be selectable in a very simple manner. The only example given in the specification achieves this selection by allowing the cutting friction to drag the blade to a deep cut position when the tool is rotated around the cable in one direction and to a shallow cut position when the tool is rotated in the opposite direction. This meets the additional requirement of extreme simplicity in that the operator does not need to make any cutting depth adjustments when using the tool.

Inter alia Counsel suggested that if the amended claims had been present in the parent application no objection would have arisen

when they were divided out. I disagree with this as in my opinion on a fair reading the general direction of the specification would have shown them to lack the necessary support and an objection would have been made accordingly.

In summary then I find that the amended claims filed on 31st October 1986 are not supported by the description, as is required by Section 14(5)(c), in that neither the alternative depths of cut nor the way in which these are consistently obtained is included within the scope of either the method claim (claim 1) or the apparatus claim (claim 12). Whilst it appears possible to provide amendments to the method claim which can meet this finding, amended claims to the tool could only be allowed if the scope of the resulting claims differ in substance from the tool claimed in the parent specification 2153157.

There appears to be sufficient time remaining if the Rule 34 period is extended as allowed by Rule 110(3) for such amendments to be filed. In the absence of timely and satisfactory amendment the application stands refused.

Dated this

8

day of

July

1988

P S MICHAELIS

Principal Examiner, acting for the Comptroller

