

Candidate's examination paper (Examination paper C/1990)Notice of Opposition [in duplicate]Patent Opposed: EPO248000 BApplication No: 86104740.9, 12/5/86Mention of Grant: Bulletin 89/28, 12/7/89Proprietor: Pipedreams Incorporated
1 Yellowbrick Road
Kansas City
Kansas, USATitle: Welding MuffOpponent: Jeremiah J. Johnson (Rodmakers) Limited
Turnpike Lane
Newcastle-upon-Tyne
EnglandState: United Kingdom (GB)Representative: Lloyd, Ann (Mrs)Address: Lloyd, Ann et al
2 Church Road
Ludlow
Shropshire
EnglandAuthorisation: General AuthorisationExtent of Opposition: The patent is opposed in its entirety, for all Designated StatesFee: A fee voucher is enclosed, authorising debiting of our deposit account by DEM 560 in respect of the Opposition FeeIndication of Evidence:Claim Ground:

1	A54(2)	* Annex 2 (WO 85/02 583) published 7.6.85
2	A56	
2,3	A56	* Annex 3 (DE-A-28 77 382) published 20.3.80
3	A56	* Annex 4 (CH-A-478 892) published 14.11.69
1	A54(2)	* Annex 5 (FR-A-2 779 566) published 27.6.80
3,4	A56	
1	A54(2)	* Annex 6 (Letter from Johnson Ltd.) published approximately 12.12.85
2,4	A56	

A copy of A6 is enclosed herewith, in duplicate.

Grounds: The patent is opposed under Art. 100 and Art. 52(1), 54 and 56, for the reasons below.

Requests: Revocation of the entire patent for all states is requested. If the Opposition Division do not decide to do so, oral proceedings are requested. The opportunity to submit evidence of oral disclosures, and other disclosures, relating to A6 is requested, including the hearing of witnesses (Art. 117(d)) with, if necessary, appropriate translation. It is particularly requested that evidence from Dr W. Hawkings, the addressee of A6, be taken.

Arguments:

1. Claim 1 - NOVELTY (Art. 54)

- 1.1 Claim 1 lacks novelty over A2. The patent (A1) is not entitled to its priority claim, since A2 is identical to the priority document (US 400245) of A1 which is therefore not a "first" application for Art. 87,89. The relevant date for Art. 54(2) is thus 12.5.86. A2 was published prior to this (7.6.85).
- 1.2 A2 is a tubular plastic muff (p. 1, lines 32-33) for joining pipe ends (p. 1, line 31), with a visual indicator of a proper seal (see p. 2, lines 11-12).
- 1.3 Claim 1 also lacks novelty over A5. A5 is a tubular plastic muff (p. 2, lines 13-25) with visual indication means (p. 3, lines 23-26, see also claim, first 5 lines p. 4). (For interest, it is also noted that the specific embodiments are virtually identical to those of A1). The claim thus lacks novelty.
- 1.4 Claim 1 also lacks novelty over the Model A welding muff of Jeremiah J. Johnson Ltd. As evidenced by A6, this muff was on sale before May 1985 and thereafter. This muff, or equivalent muffs then available, enabled a proper seal to be visually detected by their manner of melting; they must inherently therefore have possessed "visual indicator means" of some kind.
- 1.5 Further evidence will later be submitted to substantiate this indication.
- 1.6 Even if the Model A were not available, then A6 itself discloses a muff with a visual indicator of a proper seal, viz. observation of the expanded molten mass (para. 3). A6 was not confidential.

- 1.7 The question of whether the muffs were intended for use with pipes or with rods is irrelevant for novelty. The words "with rods" followed by a statement of purpose are not normally limiting (Guidelines C III), and any muff suitable for a rod would also be suitable for a pipe of the same external diameter.
- 1.8 By the same reasoning, claim 1 also lacks novelty over the catalogue excerpts enclosed with the letter showing models B & C and as explained in the letter 3rd and 4th paragraphs. The relevant date is the probable date of receipt, i.e. 12 December 1985 by post.
- 1.9 The same reasoning applies to lack of novelty over the catalogue, which is believed to have been published shortly after (see A6 first sentence). Evidence will later be supplied to verify this.
- 1.10 Evidence will likewise be supplied to verify sales of the Models B and C prior to 12.5.86, which by the above reasoning also deprive claim 1 of novelty.
- 1.11 Likewise, evidence of oral disclosures of at least the Model A at a press conference in May 1985 (see A6 paras 1 & 5) will be supplied. As noted above, disclosure of the Model A deprives claim 1 of novelty.
- 1.12 It is further believed that the Models B & C were available to the public by way of factory visits; evidence to confirm this will later be supplied.

Claim 1 - INVENTIVE STEP (Art. 56)

- 1.13 Plastics muffs are well known in the art; see A2-A6, and also the relevant introductions of A1-A5.
- 1.14 It is possible to tell, from observing the melting of such a muff, whether the seal has occurred (see, for example, A6 para 3).
- 1.15 The technical problem is simply to provide an indication of a proper seal (see p. 1, third para). The patent has claimed the use of visual means to do so.
- 1.16 In view of the fact that the skilled man is aware that he can observe the melting of the muff, this (very broad) claim does not involve any inventive step; this is the logical choice of indication. Claim 1 is thus invalid for lack of inventive step over any plastic muff (e.g. A2-A5 or A6) in combination with common general knowledge evidenced by A6.
- 1.17 Since, however, the claim lacks novelty this is of little concern.

2. Claim 2 - NOVELTY (A54)

- 2.1 Claim 2 lacks novelty over A5. A5 has the features of claim 1 (see para 1.3 above).

- 2.2 The claim is, regrettably, ambiguous; see fifth line; it is not clear whether "calibrated" applies only to "rod" or also to "rodlike protrusion", nor does applying the teaching of the description (Art. 69 and Protocol thereto) assist (see p. 5 lines 19-21).
- 2.3 Whilst this is not a ground of opposition the Guidelines and case law state that the construction less favourable to the patentee should be used. Assuming, therefore, that the word "calibrated" does not qualify "rodlike protrusion", A5 has inner and outer parts (10,14) and an electrical resistance heating winding (tubular heating grill 17, which is "wound" in a tube - the claim does not require a helical winding) and a rodlike protrusion in a blind bore 24 moving to indicate the generated pressure (p.3 lines 10-30; the expelled material forming a rodlike protrusion). The reference in the penultimate line to "calibrated rod" is an obvious error (Rule 88); the Claim should be construed to mean either rod or protrusion at this point (Art. 69 + Protocol).

Claim 2 - INVENTIVE STEP (A56)

- 2.4 Alternatively, the "calibrated rod" embodiment specified in claim 2 lacks inventive step over A5 and the various disclosures of B or C in A6 (discussed above, paras 1.8 - 1.10 & 1.12).
- 2.5 The claim is novel over B & C in that it specifies a two-part muff, and over A5 in that it specifies a calibrated rod in the blind bore.
- 2.6 Starting from B or C, the skilled man would realise that the important new feature of visual indication was equally applicable to muffs for plastic pipes (A6 relates, apparently, to rods which do not melt to the muff). The technical problem involved is thus to adapt B or C for a plastics pipe.
- 2.7 He would be aware of A5, which relates to such pipes, with an equivalent indicator, and would be led to adapt the plastics inner layer (beneath the electric elements) to obtain the watertight seal, promised by A5 (p. 1, lines 17-20). In doing so, he would thus reach the structure of claim 2 which thus lacks inventive step as an obvious combination of elements, with no interrelation giving a new technical effect.
- 2.8 He would also obtain this two-part form, for similar reasons, from A3 (which could be used for pipes, as indicated by p. 1 lines 1-2, although it is for cables), and would do so if he wished to make a muff for cables (which, nonetheless would be suitable for pipes).
- 2.9 Alternatively, the skilled man aware of A5 and seeking to yet further improve the reliability of his visual indicator (page 1, lines 24-29) would be aware of the recent muffs B & C, from the same or a closely-analogous field and for the same or a closely-analogous purpose.

- 2.10 He would perceive the advantage of using the calibrated rod, namely, greater accuracy, and would be able to replace his previous arrangements with very little adaptation of the blind bore and the addition of the calibrated rod, thus deriving the claimed subject matter which consequently lacks inventive step. (The replacement of his grid with a spiral heater wire is unnecessary, but would also be trivial).
- 2.11 Similarly, the skilled man aware of A3, and attempting to solve the known (from A5 & A6) problem of improving the indication of melting, would apply the teaching of the blind bore and calibrated rod of B or C (from A6).
- 2.12 To sum up, claim 2 relates (in combination with claim 1) to an obvious combination of
- the two-part muff with electric heater, known from A3 or A5, and
 - the calibrated rod visual indicator muff with electric heater, known from A6.

There is no functional interrelation between the two, and no surprising (or otherwise) advantage to the combination which thus inherently lacks inventive step as a mere collocation (Guidelines, C IV). Also, the prior art leads to the invention as an obvious combination of A6 and A3 or A5.

3. Claim 3 - INVENTIVE STEP (Art. 56)

- 3.1 The elements of claim 3 are, of themselves, known and form an obvious combination without any interrelation or surprising advantage. The claim thus lacks an inventive step, as will be demonstrated.
- 3.2 A5 shows a method of making two-part thermoplastics muffs (p. 1, first para) in which a wire is wound onto an inner part whilst being heated (p. 2 lines 3-5), and an outer part is thereafter applied. No particular wire is specified, but the claimed wires appear to be well known (they have trade names) and their selection is a mere matter of design choice (see, for example, A4 lines 15-20 especially last words).
- 3.3 The skilled man seeking a method of making muffs according to A5 would naturally be led to try the method of A3, used for a similar structure; replacing his tubular grille wire with the helical winding of A3 in the process.
- 3.4 To obtain the different-colour bulbs of A5 p3 lines 27-30, in the embodiment of p3 line 30 - p4 line 7, it would be necessary to colour the exposed inner material layer differently to the outer.
- 3.5 The number of recesses in the structure of A5 is clearly at least two, but the provision of at least 3 would be trivial.
- 3.6 The skilled man would also be aware of A4, which teaches a muff in which the adhesion between the windings and the

plastic parts is improved (p1 lines 9-12). In view of the teaching of A4 he would conclude that this was desirable and would be led to try one or more of the steps on page 1 lines 15-21 of A4.

- 3.7 Step (b) involves degreasing and catalytic reduction (p2 line 2 and lines 32-33).
- 3.8 Step (c) involves coating with a modified polyolefine (p3 lines 7-12, p1 lines 19-21). It is not clear whether the examples at p2 lines 12-13 involve an unsaturated carboxylic acid; in any case, no advantage is given for this except that (p4 line 34) it is stated to be of the same material as the muff body. The same is true of A4 (see p3 line 10). This feature is thus either disclosed in, or a mere obvious choice over, A4.
- 3.9 The only remaining limitation of the claim is that the heating of the wire is by passing current through it.
- 3.10 This is implicit in the use of a heating wire (see A3-A6) and hence the skilled man could easily simplify the apparatus of A3 by substituting an electric current for the heater illustrated.
- 3.11 Claim 3 thus lacks inventive step because it differs only in design details from a combination of the processes of A3 and A4 used to make the muff of A5.

4. Claim 4 - INVENTIVE STEP (A56)

- 4.1 The problem of providing muffers in different sizes having common welding times was known from May 1985 (see A6 para 5).
- 4.2 The skilled man would be aware, from A5, that the welding time of a muff is a function of wire resistance and muff size (p. 2 lines 31-34).
- 4.3 The claim merely claims all solutions to a known problem, in that if the size of the muffers is different, then (applying the teaching of A3) the resistance of the wire must be varied to compensate this in order to keep a constant time.
- 4.4 The exact nature of the relationship is easily derived by the skilled man by trial and error.
- 4.5 Thus, the claim lacks inventive step in that, in attempting to solve the known problem, the skilled man (who would be aware of A5, from the same art) would make use of the known relation between time, size and resistance. No advantage is attributed in the patent to the provision of a "set" of such muffers.

5. Possible amendments (Art. 123)

- 5.1 Various matter in the application is not the subject of claims, but nonetheless any amendment of the claims to limit (to avoid Art. 123(3)) the claims by including such matter

would, even if it did not contravene Art. 123(2), not in a valid patent.

- 5.2 For example, p. 5 lines 24-27 is disclosed as such in A5 p. line 26 - p. 4 line 4.
- 5.3 Page 5 lines 15-17 is disclosed in A2 (see, eg, abstract).
- 5.4 Page 5 lines 29-30 is obvious from A5, which teaches variable alignment (p.4 lines 6-7 and preceding text).
- 5.5 Page 5 lines 10-13 are obvious; it is well known in the heating art generally what effects short-circuiting and winding would have.

6. Conclusion

The patent as a whole contains no patentable subject matter on which an amended patent could be sustained.

Yours faithfully,

A. LLOYD
Authorised Representative

Enc. A6 (x2)

Legal Points Noted

- 1. The English version of the patent A1 was used.
- 2. The opposition could be filed in English, French or German (Art. 14(1)). Art. 14(2), Rule 1(1) is unavailable.
- 3. I have attacked claim 3 against the client's wishes, because that claim confers, under Art. 64(2), protection on its direct products which he exports into Europe from Portugal.
- 4. Although Portugal is associated with the EEC "free circulation" rule under Art. 30 + 36 Treaty of Rome would not give the client a defence since goods made in a country without a patent are not made with "consent".
- 5. Based on his letter the client might have, in national laws, a "prior use" right derived from the relevant CPC protocol and draft article.
- 6. I have opposed the patent in its entirety in view of a recent Appeal Case in which Art. 101 is said to override Art. 114(1), so that later facts and evidence may be introduced against other aspects of the patent.

7. A2 is published on the priority date of A1. It was thus available before that date and could not, if the priority is valid, be prior art under A54(2).
8. Nor would it have been prior art under A54(3) since the national fee was not paid (Art 158(1) subject to Art. 158(2)). This fee could have been paid, at the latest if the EPO were elected, 31 months from priority (Rule 104b(1), PCT Art. 39(1)(a)) plus the period of grace under Rule 85a (allow, say, two months including notification) which is at latest 1986. Even though restitutio (Art. 122) is available this would only extend the time limit to 31 months + 1 year, from priority, = 9.7.1987.
9. This PCT application thus cannot enter the national phase, for A54(3).
10. However, the priority date of A1 is invalid and thus A2 is available under A54(2) as prior publication.
11. This is because, as A2 is identical to the priority document of A1 but was filed earlier, that priority document was not a "first" application under Art. 87(1) and the Paris Convention, and thus gives rise to no effect under Art. 89 so the filing date for Art. 54(2) is the actual filing date.
12. Thus, the abstract is also citeable (Art. 85 last clause does not apply).
13. A3-A5 are all citeable under A54(2) and are available for Art. 54 and Art. 56.
14. A6 itself is not necessarily a publication - a business letter is not necessarily public. However, in this case it is a letter to a customer enclosing parts of a catalogue. It contains the following disclosures:
 - a) The enclosed catalogue excerpts

These are not confidential; they are intended for publication. The relevant date is, according to a recent case, the date of receipt not of sending. This is probably about 2 days later, i.e. 12.12.85.
 - b) Evidence of an oral disclosure

Such disclosures are, according to the Guidelines Chapter D, a "making available to the public" Art. 54(2). The Press Conference in May 1985 apparently involved disclosure in public of the Model A.
 - c) Sale

This gives the buyer the right to discover the invention (Guidelines Chapter D) for Art. 54(2). The Purchasing Dept. apparently bought the Model A before May 1985. It is important to check whether this was a non-confidential sale. Other sales may also have occurred.

d) Offer

The Model B is apparently available for purchase. However, this alone probably does not make it available to the public until one member of the public actually bought one. The Model C would apparently be available in Spring 1986.

e) Factory Visit

According to the Guidelines, in a case where customers who were not wholly ignorant went to visit a factory, even though it said "No Unauthorised Personnel", this was a disclosure. This applies exactly here; the Managing Director of a Construction firm is not wholly ignorant of pipes.

15. However, all the above need separate evidence (statements, or oral evidence, from witnesses) which could be introduced later.
16. I think claims 1 and 4 lack unity (Art. 82, Rule 30) as they are concerned with entirely different technical problems. However, this ground is NOT available for opposition (Art. 100; case law). The same is true of various other defects in the patent under Art. 83 & 84.

Note on Solution to Question

1. I believe my answer to the client over claim 3 emerges from 'Legal Points' para 3, 4 + 6.
2. I think the attack based on "inherent" disclosure by A (para 1.4) is weak in view of G2/88 and G6/88.
3. Likewise the 'inventive step' argument against claim 1 (paras 1.13 - 1.16) is not particularly strong.
4. Further, the novelty attack on claim 2 over A5 is weak because a winding may not include the (obviously equivalent) tubular grille thereof.
5. Finally the attack on claim 3 is tenuous as it is based on 3 documents yet still does not reveal all the claimed features.