

OPINION UNDER SECTION 74A

Patent	GB 2496700 B
Proprietor(s)	Balltec Limited
Exclusive Licensee	
Requester	Flintstone Technology Limited
Observer(s)	
Date Opinion issued	04 July 2014

Request

1. The comptroller has received a request from Marks and Clerk LLP on behalf of Flintstone Technology Limited to issue an opinion on whether GB 2496700 B (“the Patent”) is valid in terms of novelty and inventiveness in light of a number of patent documents.

Allowance of the request

2. The request for an opinion on the validity of the patent is allowable in part, as discussed below.

3. The following documents have been identified by the requestor with possible relevance to the novelty or inventiveness of the patent.

US 4568221 (Societe National Elf Aquitaine)
 US 6615554 B2 (Stan Ruplper)

GB 2436920 A (Oil State industries UK Limited)
 US 4676696 (Shell Oil Company)
 US 2011/0240403 (D B Industries Inc)

4. Rule 94 (1)(b) states that the comptroller shall not issue an opinion if the question upon which the opinion is sought appears to him to have been sufficiently considered in any relevant proceedings. In decision BLO/370/07 the hearing officer stated that “It is an intrinsic part of the substantive examination process to assess the novelty and obviousness of the claims, as properly construed, in the light of the prior art. In this context, “prior art” means documents cited in the search report (at least under category “X” or “Y”, which indicate possible relevance to novelty or

inventive step) as well as material which has come to the examiner's attention in some other way. I think it reasonable to suppose in general that the examiner will have done his or her job properly in the absence of indication to the contrary, and I see no reason why this assumption should not apply even if the examiner has decided not to raise objection on the basis of any of the citations at substantive examination."

5. The last three documents were brought to the attention of the examiner prior to him granting the patent, therefore, in light of the above and Rule 94 (1)(b) I shall not consider them in this opinion.

6. Documents US4568221 and US6615554 were not considered by the examiner prior to grant of the patent and are published before to the priority date of the patent, therefore I will consider their relevance.

Observations

7. No observations were received.

The patent

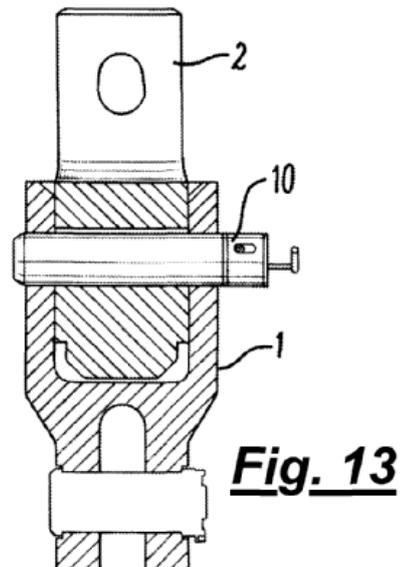
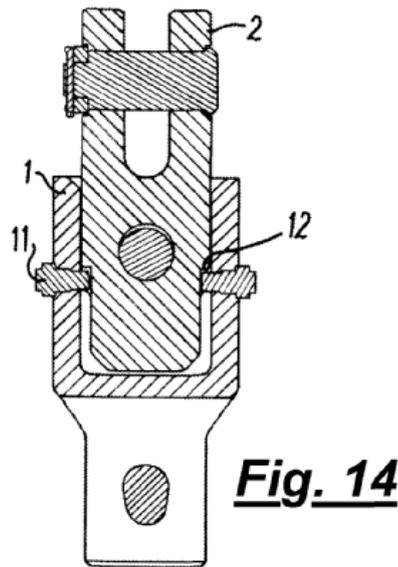
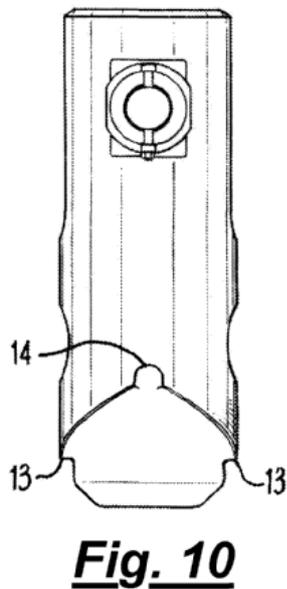
8. The patent was granted on 17 September 2013 and is still in force.

9. The patent relates to a connector for two elements that have mutually cooperating formations, such that when the two elements are brought together the formations cause the two elements to rotate relative to one another so that they are brought into sufficient rotational alignment to enable a locking member to be used to connect the elements together.

10. There is one independent claim which reads:

Claim 1: A connector comprising first and second elements, each element comprising a respective structure arranged so that, when the two elements are brought together in sufficient rotational alignment with each other, a locking member may be engaged with the two respective structures to connect the two elements together, wherein the connectable elements comprise respective mutually cooperating formations arranged such that, as the connectable elements are brought together out of sufficient rotational alignment, engagement of the respective cooperating formations causes the two elements to rotate relative to one another so that they are brought into said sufficient rotational alignment to enable the locking member to be engaged with the respective structures.

11. The following drawings help with the understanding of the claim.



- 1- Female element
- 2- Male element
- 10- Locking pin
- 11- Protrusions
- 14- Slots

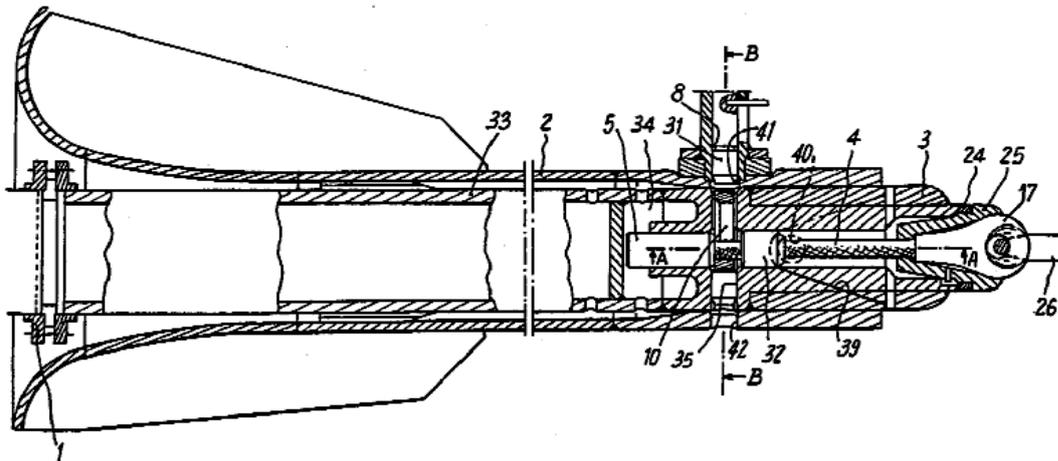
Claim construction

12. There has been no discussion regarding claim construction but I have followed the guidance set out in *Kirin-Amgen and others v Hoechst Marion Roussel limited and others* [2005] RPC 9. The key point being “what a person skilled in the art would have thought the patentee was using the language of the claim to mean”. I will therefore interpret these aspects of the claim in a purposive manner and interpret them in light of the descriptions and drawings, taking in to account the Protocol to article 69 of the EPC.

Novelty

13. In assessing whether the claim is novel in light of the citations the requester has broken the claim down into a number of parts and I will adopt the same approach.

14. Turning first to US4568221, a drawing from which is included below to help with understanding the following discussion. It shows a device for connecting cables or pipes to a fixed sleeve.



15. Comparing each of the parts of the claim to the citation.

Claim 1 A connector comprising first and second elements 2 and 3 each element comprising a respective structure

16. Elements (fixed sleeve) 2 and (pulling head) 3 have respective structures in the form of apertures (ports) in the element 2 and the element 3

arranged so that, when the two elements are brought together in sufficient rotational alignment with each other, a locking member may be engaged with the two respective structures to connect the two elements together,

17. In the connector of '221, when in correct rotational alignment, "locking drawer 10 causes insertion of tenon 37 into port 42 in sleeve 2 and pusher 31 into port 41, the pulling head remains locked in sleeve 2", thus it would seem to show the features of this part of the claim.

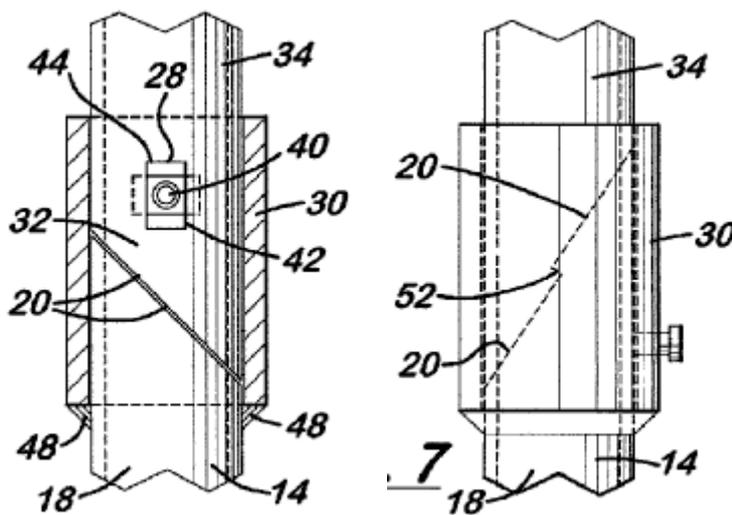
wherein the connectable elements comprise respective mutually cooperating formations arranged such that, as the connectable elements are brought together out of sufficient rotational alignment, engagement of the respective cooperating formations causes the two elements to rotate relative to one another so that they are brought into said sufficient rotational alignment to enable the locking member to be engaged with the respective structures.

18. The connectable elements include respective mutually cooperating formations (finger 16 and ramp 39) which rotate and align the connectable elements so that they can be locked together, as explained in the following quote from citation '221.

"As the pulling head assembly progresses along the inside of sleeve 2, FIG. 4, guiding of pulling head 3 is facilitated by guide collars and as pulling head 3 approaches the remote end of sleeve 2, the straightening finger 16 carried by sleeve 2 engages one of the helical ramps 39 adjacent the upper end of pulling head 3 and causes pulling head 3 to turn on its longitudinal axis to

angularly orient pulling head 3 with respect to sleeve 2. When the straightening finger 16 reaches the bottom of ramp 39 it abuts the end or bottom face 39a (FIG. 4) of the ramp. In such position pawl 18 is aligned with opening 40 in the pulling head 3 and relative longitudinal movement of pulling head 3 and sleeve 2 is stopped or immobilized. The spring biased pawl 18, having been urged into a retracted position by contact with pulling nose 3 as finger 16 moves along ramp 39, immediately enters opening 40 in the pulling head 3 and immobilizes head 3 in sleeve 2 in a selected angular and longitudinal position.”

19. Turning to document '554, drawings from which are included below to help with understanding the following discussion.



Claim 1 A connector comprising first and second elements,

20. The document shows a connector for connecting first and second elements 30 and 34.

each element comprising a respective structure

21. Each element includes bolt holes 28

arranged so that, when the two elements are brought together in sufficient rotational alignment with each other, a locking member may be engaged with the two respective structures to connect the two elements together,

22. When aligned, the bolt holes are used to connect the two elements together by use of bolt 20.

wherein the connectable elements comprise respective mutually cooperating

formations arranged such that, as the connectable elements are brought together out of sufficient rotational alignment, engagement of the respective cooperating formations causes the two elements to rotate relative to one another so that they are brought into said sufficient rotational alignment to enable the locking member to be engaged with the respective structures.

23. The elements include mutually cooperating formations (diagonal cut 20 and the diagonal leading portion on element 34) which in use would seem to implicitly cause rotation of the elements due to engagement of the cut and diagonal leading portion when the elements are brought together.

24. Turning next to the appendant claims.

Claim 2: A connector as claimed in claim 1 wherein at least one of the structures comprises an aperture through which a locking member may be received.

25. As discussed above, both structures on the elements of both citations are apertures through which a locking member may be received.

Claim 3: A connector as claimed in claim 2 wherein both structures comprise an aperture.

26. As discussed above both structures on the elements of both citations are apertures through which a locking member may be received.

Claim 4: A connector as claimed in any preceding claim wherein the first element is a female element and the second element is a male element which may be received into the female element.

27. Both citations show male elements which are received inside a female element, specifically in '221 male element 3 is received in female element 2 and in '554 male element 34 is received in female element 30.

Claim 5. A connector as claimed in claim 4 wherein the cooperating formations are arranged such that any contact between the formations as the male element is introduced into the female element causes the male element to rotate relative to the female element in order to align the structures of each element appropriately.

28. As discussed above in relation to claim 1, this feature is shown in both citations.

Claim 6: A connector as claimed in either claim 4 or 5 wherein a cooperating formation on one element comprises a protrusion, and a cooperating formation on the other element comprises a profiled surface.

29. Citation '221 shows a protrusion in the form of the finger 16 which engages with a ramp (profiled surface) on the other element.

30. Citation '554 in fig 7 shows an element having a protrusion in the form a catch 52 which engages with a ramp on the other element.

Claim 7. A connector as claimed in claim 6 wherein the profiled surface comprises a shoulder or groove.

31. In citation '221, ramp 39 would seem to form a shoulder.

32. In citation '554, the catch 52 would seem to form a shoulder.

Claim 8. A connector as claimed in any of claims 4 to 6 wherein the female element defines a bore, an aperture extends from an outside surface of the element into the bore and a formation projects from an inside surface of the bore.

33. In citation '221 the female element is shown to define a bore and has an aperture in the side wall. The finger 16 carried by the female element acts as a projection and projects from the inside surface of the bore.

34. In citation '554 the female element defines a bore and has apertures in the form of bolt holes. The cut 20 and particularly the catch 52 appear to project from the inner surface of the bore.

Claim 9. A connector as claimed in claim 8 wherein the male element comprises a portion arranged to be received into the bore of the female element, an aperture extends into the portion and a cooperating formation is formed on the surface of the portion.

35. The male portion 3 in citation '221 is received in the bore of the female element and has an aperture in the sidewall. The male portion has a cooperating formation (ramp 39) on the surface of the portion.

36. In citation '554 the male portion is arranged to be received in the female portion and has aperture in the form of bolt holes. A cooperating formation portion is present in the form of the cut 20 and catch 52.

Claim 10. A connector as claimed in claim 9 arranged such that as the male member is introduced in to the bore of the female member any contact between the respective cooperating formations causes the two elements to rotate relative to each other so that when the male element is fully received into the female element the aperture in the female element is sufficiently aligned with the aperture in the male element to enable a locking member to be introduced through the aperture in the female element into the male element thereby to lock the two elements relative to each other.

37. These features also seem to be disclosed in citation '221, for example, in the quote above in paragraph 18.

38. For citation '554 these features have been discussed in paragraph 22 and 23 and once alignment has occurred bolts 40 can be inserted.

Inventive step

39. As it is my opinion that the claims lack novelty in light of the evidence supplied, it follows that it is also my opinion they lack an inventive step.

Opinion

40. It is my opinion that claims 1-10 of the patent lack novelty in light of documents US 4568221 and US 6615554 B2.

Application for review

41. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

Lyndon Ellis
Examiner

NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Office.