

Section 72(1)

0146191

PATENTS ACT 1977

IN THE MATTER OF
an application by Franz Eichler
for the revocation of Patent 2088264
in the name of Julien Lankry
and Brian Ronald Tompkins

DECISION

Revocation of the patent-in-suit is sought under Section 72(1) of the Patents Act 1977 on the ground that the invention is not a patentable invention in the light of the following patent specifications:

- GB 1574911 (Leitner) published on 10 September 1980
- GB 1538137 (Lesner & MacDonald) published on 17 January 1979
- GB 958932 (Schlotter & Weissenhorn) published on 27 May 1964
- GB 821943 (Schmitt) published on 14 October 1959
- DE 1603888 (Leitner) published on 16 June 1971

This ground is also based on prior use of the invention in Germany, the UK and elsewhere, with the following particular instances:

- (a) Display at the Birmingham Spring Fair on 3 to 7 February 1980
- (b) Delivery to Filegold Ltd in early 1980 and subsequent sale by them.

This ground is further based on the common general knowledge of the man skilled in the art of tools in general.

The parties have agreed that a decision on this application shall be given without a hearing.

The patent is dated 24 August 1981, with priority dates of 28 November 1980 and 18 March 1981. It was granted on 14 November 1984. The patent is concerned with a screwdriving attachment for engagement by a portable power tool. The attachment has a replaceable bit engaged in a shaft coupled to the tool and inner and outer concentric sleeves surrounding the bit. The inner sleeve has pockets to retain balls which are movable radially by relative movement of the inner sleeve in the outer sleeve, between radially inner positions to locate around the shaft of a screw fastener radially engaged by the bit to retain the fastener head at the bit and radially outer positions allowing axial separation of the fastener from the bit. Such occurs automatically upon initial abutment of the inner sleeve against a workpiece accepting the fastener as the fastener is driven in. Further movement of the inner sleeve rearwardly of the bit causes like outer sleeve movement by the balls until the outer sleeve abuts an axially adjustable stop sleeve. The stop sleeve position determines the final position of the fastener head relative to the work piece by disengagement of the bit from the head since further forward bit movement relative to the sleeves is prevented.

Claim 1, as granted, is directed to:-

A device for rotating a screwthreaded fastener, said device comprising an elongate member having one end thereof adapted to be received in the jaws of a rotary

machine, and a recess in the other end thereof, a screw driving member removably engageable within said recess which is adapted to prevent relative rotation between said elongate member and said screw driving member, retaining means slidably mounted on said elongate member so as to be movable longitudinally relative thereto, said retaining means comprising inner and outer sleeve members mounted on said elongate member so as to be slidable relative thereto and to each other, at least one movable member located by said inner sleeve member but movable radially thereof and a recess in said outer sleeve member adapted to receive said movable member, and first and second spring means operable to bias said inner and outer sleeve members respectively longitudinally of said elongate member away from said one end, and adjustable stop means disposed on said elongate member so as to limit the movement of said retaining means in a direction towards said one end.

Claims 2 to 11 are directed to subordinate features of the invention, and claim 12 is an omnibus claim, that is, to the device as described. I shall refer to these claims later.

Evidence has been given on behalf of the applicants for revocation by:-

(a) Kajetan Leitner, head of Research and Development from 1970 to 1978 at Springfix GmbH, West Germany and a business partner since 1978 associated with Optigrip Werkzeuge, licensee of Herr Leitner's developments in driving tools for screw fasteners. His declaration has the following Appendices:-

A. A Springfix working Drawing dated 21 October 1977 showing a complete screwdriving attachment.

B. A two page EMCO sales pamphlet relating to a range of such attachments for different size ranges of fasteners.

C. A Springfix working drawing dated 6 February 1975 showing details of inner sleeve apertures, in an attachment, for restraining locking balls from falling out.

D. A Springfix working drawing dated 5 March 1975 showing details of the attachment outer sleeve.

E. A copy of GB 1574911

F. A letter dated 12 December 1979 from Optigrip to Filegold Ltd, a West London Company which is said to be an importer of screwdriving attachments from Optigrip, with operating instructions for such attachments.

G. Copies of correspondence between Filegold and Optigrip referring to the ordering of supplies of attachments by Filegold and particularly to the display of such attachments at the Birmingham Spring Fair of 3 to 7 February 1980.

(b) Franz Eichler, owner of Optigrip Werkzeuge for ten years, with the following Exhibits:-

FE1. A screwdriving attachment stated to be of the type exhibited at the Birmingham Spring Fair by Filegold under the Trade Mark "HICO".

FE2. Advertising material in card form stated to be for accompanying such a screwdriving attachment as Exhibit FE1 when for sale in the UK.

(c) James Charles Boff, Chartered Patent Agent acting on behalf of Herr Eichler, dated 17 July 1989, with the following exhibits:-

JCB1. Copies of correspondence between Filegold and Optigrip relating to a series of orders by the former for screwdriving attachments, to artwork for the advertising material, and to a distribution agreement for Filegold to sell such attachments in the UK and Eire.

JCB2. Copy of an invoice from Optigrip to EMCO Maier & Co for screw-driver attachments.

JCB3. An English language version of Appendix B to Herr Leitner's statutory declaration.

Evidence in the form of a statutory declaration dated 14 April 1989 has been given by the inventor and joint proprietor Julien Jean Louis Lankry.

For the novelty attack, the applicants rely primarily on Appendix A, the Springfix working drawing, which shows a sectional side view of a complete screwdriving attachment. However, this drawing looks to be a typical internal company drawing apparently for the benefit of its production personnel and Herr Leitner's description of it is insufficient to satisfy me that it was made available to the public before the relevant date. There is also no clear evidence that the attachments referred to in the EMCO pamphlet, Appendix B, are constructed in the same manner as that of the Springfix drawing.

Looking at the other evidence provided by the applicants, I find that Exhibit FE2 is of most value. This is the advertising card which is stated as providing backing for the attachment at point of sale. That it is used for this purpose is made clear from the wording on the front side, "Converts your drill into a Power Screw Driver!", and the subsequent wording which is obviously directed to prospective buyers of the attachment. On the reverse side, at the bottom left hand column, there is wording stating that the attachment is made by Optigrip with a reference to Filegold implying that it is the selling company. The relevance of this will be determined later in connection with the matter of prior disclosure.

The reverse side of the card also carries a diagram, and I will first consider whether this anticipates claim 1. Claim 1 starts:

"A device for rotating a screwthreaded fastener, said device comprising an elongate member having one end thereof adapted to be received in the jaws of a rotary machine and a recess in the other end thereof".

The diagram shows a shaft 9, clearly for coupling with a rotary machine such as a power drill, connected via a clutch 7 to a sleeve, the sleeve having a recess for accepting a screwthreaded boss forming part of a screwdriving bit 4. The patentees argue that where such a shaft and a sleeve are separate items connected by a clutch, they cannot be considered as a unitary "member" as claimed, and that such unitary member of the patent is a less expensive solution. However, I consider that the term "member" does not necessarily infer a unitary construction; furthermore, the operation of the shaft and sleeve together for transmitting torque to a fastener engaging bit is the same as in the patent. Accordingly I consider that there is no distinction between this feature of Claim 1 and Exhibit FE2.

Claim 1 continues

"a screw driving member removably engageable within said recess which is adapted to prevent relative rotation between said elongate member and said screw driving member".

The diagram shows the screw driving member 4 having a screw-threaded boss engageable in a screw-threaded bore of the sleeve. This clearly satisfies the removable engagement aspect, but the patentees question whether the aspect of preventing rotation is satisfied, since prevention only occurs in one direction. However, Exhibit FE2 refers to the device being reversible in operation, and I consider that the intention, during normal operation of the attachment, is for the bit to be held against rotation in the sleeve.

Claim 1 then refers to

"retaining means slidably mounted on said elongate member so as to be movable longitudinally relative thereto, said retaining means comprising inner and outer sleeve members mounted on said elongate member so as to be slidable relative thereto and to each other".

The diagram clearly shows an inner sleeve (the front bushing 1) and an outer sleeve (the outer barrel 2).

The next feature of claim 1,

"at least one movable member located by said inner sleeve member but movable radially thereof"

is clearly provided by the ball 6, and the

"recess in said outer sleeve member adapted to receive said movable member"

is provided by the inwardly open recess in sleeve 2 close to its forward end. It is clear from an inspection of the diagram on Exhibit FE2 that the balls 6 will move outwards into the recess as the screw and bit are driven home.

Similarly in my opinion it is clear to the skilled reader of Exhibit FE2 that the

"first and second spring means operable to bias said inner and outer sleeve members respectively longitudinally of said elongate member away from said one end"

are provided by the inner and outer springs, which extend between a fixed sleeve 3 and an abutment on its respective inner or outer sleeve, thus acting to bias each sleeve forwardly from the sleeve 3.

The final feature of Claim 1, the

"adjustable stop means disposed on said elongate member so as to limit the movement of said retaining means in a direction towards said one end"

is provided in the diagram by the "adjust" ring 8, the operating instructions alongside, termed "Depth (sic) Adjustment" clearly referring to the ring adjustment.

Therefore, I am satisfied that the diagram in Exhibit FE2 discloses the attachment claimed in Claim 1. The question now requiring resolution is whether or not the attachment forming the subject of Exhibit FE2 was available to the public before 28 November 1980.

Herr Eichler gives evidence that Exhibit FE2 is advertising material as attached to the screwdriving attachment taking the form of Exhibit FE1, which was exhibited at the Birmingham Spring Fair. Although he refers to the dates of such as in March 1980, it is clear from the correspondence between Filegold and Optigrip in Appendix G and Exhibit JCB1 that the dates were actually 3 to 7 February 1980. Mr Lankry says in his declaration that the applicants have not established that the "EMCO" article, which, I presume, refers to the same attachment, was on sale before 28 November 1980 but I can see nothing to support his

assertion. From a study of Exhibit FE1, all of its features which can be seen from an external view point, ie the outer sleeve, the adjustable stop cap, the rearward shaft portion with the ball and plate clutch and the leading end of the inner sleeve with the radially movable balls in apertures, accord with the diagram of Exhibit FE2. I am therefore satisfied that Exhibit FE2 is a diagram of the attachment which is Exhibit FE1, but the evidence I have referred to falls short, in my view, of establishing that this attachment was actually shown at the Birmingham exhibition. Therefore I need to look further at the material provided by the applicants.

I have already mentioned the references in Exhibit FE2 to Optigrip and Filegold. Appendix G and Exhibit JCB1 provide correspondence between Filegold and Optigrip which includes a series of orders from Filegold for an article "Optigrip Model III/21" between 3 January 1980 and 21 July 1980 totalling many thousand items, and an Optigrip letter of 12 December 1979 referring to the launch of "Model III/21" on the British market. A letter in Exhibit JCB1 from Filegold to Optigrip and dated 3 January 1979, (clearly a mistake, meaning 3 January 1980), refers to proposed artwork for the "HICO Power Screwdriver" to be sold by Filegold. The accompanying page of artwork appear to me to be identical to the front side of Exhibit FE2. On balance I am satisfied that this artwork was proposed for the article "Model III/21" mentioned throughout the remainder of the correspondence between the two companies, and in consequence I consider that Exhibits FE1 and FE2 refer to the Optigrip attachment designated "Model III/21".

The correspondence indicates a series of repeated orders for the same article. This implies either that the article was being sold during the period between January and July 1980 or that it was being distributed preparatory to sale during that time. In view of this I consider it probable that the article and the advertising material were available to the public before 28 November 1980, a full four months after the latest date of the correspondence in evidence. Accordingly I conclude that Claim 1 is not new having regard to Exhibit FE2.

Although I have found that the invention of Claim 1 lacks novelty, I will now deal with the obviousness attack which is based on patent specifications GB 1574911 and DE 1603888 both of which disclose screwdriving attachments for use with rotary machines and were published before the priority date of the patent-in-suit.

Claim 1 starts

"A device for rotating a screwthreaded fastener, said device comprising an elongate member having one end thereof adapted to be received in the jaws of a rotary machine".

Fig 1 of GB 1574911 shows an assembly comprising an outer hollow shaft 22 for engagement by a machine and an inner shaft 20 coupled to it via a clutch assembly. As with Exhibit FE2 I am of the opinion that this construction does read onto the wording of Claim 1, notwithstanding the presence of the clutch. In any case, the alternative construction shown by Fig 10 of GB 1574911 and the description on page 5 lines 6 to 10 indicate the provision of the inner shaft 20 alone, without the present of a clutch.

Claim 1 continues

"and a recess in the other end thereof, a screwdriving member removably engageable within said recess which is adapted to prevent relative rotation between said elongate member and said screwdriving member".

None of the embodiments of GB 1574911 provides these features, the screw driving member forming an integral part of the elongate member; however it is to be noted that the operating function is the same.

Claim 1 then refers to

"retaining means slidably mounted on said elongate member so as to be movable longitudinally relative thereto, said retaining means comprising inner and outer sleeve members mounted on said elongate member so as to be slidable relative thereto and to each other".

The requisite sleeve members are clearly provided by respective sleeves 1 and 2 in Fig 1 of GB 1574911.

The next feature of claim 1,

"at least one movable member located by said inner sleeve member but movable radially thereof"

is clearly seen to be the ball 12 in GB 1574911 and

"a recess in said outer sleeve member adapted to receive said movable member"

is to be identified with the recess designated 15 in the same document.

Claim 1 continues,

"first and second spring means operable to bias said inner and outer sleeve members respectively longitudinally of said elongate member away from said one end".

These are clearly provided in GB 1574911 by respective springs 4 and 5.

The final feature of claim 1,

"adjustable stop means disposed on said elongate member so as to limit the movement of said retaining means in a direction towards said one end"

is clearly shown by the cap 36 in GB 1574911.

In summary, GB 1574911 discloses all of the subject-matter of Claim 1 except for the forward recess in the elongate member having a removably engageable screw driving member, relative rotation being prevented therebetween. For this matter I turn to DE 1603888, in which Fig 1 shows a blade b located in an axial slot in a concave recess 6 in an elongate member, akin to that of GB 1574911, and held therein by a radial securing element y. On page 10 lines 24 to 28 of the translation of this document, replacement of the blade is referred to. It is clear that the blade is held in the recess against relative rotation with respect to the elongate member.

Both prior patent documents relate to broadly similar screwdriving attachments and both are by the same applicant, Herr Leitner. Despite the differences between them which can be seen in respect of the operation of the sleeves, I consider that the substitution of the replaceable blade and elongate member construction of DE 1603888 for the construction of GB 1574911 would readily occur to a man skilled in this particular art. Therefore, I find that Claim 1 does

not involve an inventive step having regard to the subject-matter of GB 1574911 and DE 1603888.

I now turn to the appendant claims. Claims 2 and 3 refer to the driving member comprising a screwdriver blade and allen key respectively. Exhibit FE2, on the reverse side left-hand column under the heading "Bits", discloses a "slot" bit, as do GB 1574911 and DE 1603888. Therefore Claim 2 falls. None of the evidence actually discloses the use of an allen key in such an attachment; however, the provision of an allen key as an option in a range of different driving members for various fasteners is well-known in the fastener-driving art. Exhibit FE2 refers under "Bits" to alternative members and the translation of DE 1603888 page 12 lines 25 to 28 refers to a screwdriver blade, hexagonal socket and Phillips head driving members. The skilled person would, in my view, appreciate that an allen key was notionally to be added to this list, and therefore Claim 3 falls for lack of inventive step.

Claim 4 refers to one end of the shaft being of circular cross-section. Exhibit FE1 has a hexagonal cross-section for the rearmost part of the elongate member and in GB 1574911, on page 5 lines 6 to 10, it is stated that the elongate member is formed at its rear end so that it "snaps into the socket of the screw driver which ordinarily has hexagon as drive member", both suggesting that the attachments developed by Herr Leitner were intended to have such a non-circular cross-section. However, the provision of a circular cross-section end portion for gripping by the jaws of a rotary drill is extremely well-known and is, I consider, not inventive. Accordingly, claim 4 falls.

Claim 5 refers to the recess being able to receive a screw head, and is clearly disclosed in Figs 1, 2 and 7 of DE 1603888 by the concavely curved recess 6 adjacent the blade which, as stated on page 10 lines 20, 21 of the translation, accepts the curved head of a fastener to be engaged by the blade and thus falls. Similarly, Claim 6, which refers to the inner sleeve member having at least one aperture retaining a radially movable member, is clearly disclosed by the ball 6 in Exhibit FE2 and by the ball 12 in GB 1574911, and the respective apertures shown in these documents, and also falls.

Claim 7 refers to such apertures being equi-angularly spaced, each having an innermost lip to prevent the members passing through and mutually contacting when in their innermost positions. The initial feature of the equi-angularly spaced apertures is clearly seen in the drawings of both patent documents and from a study of Exhibit FE1. The succeeding feature of the "lip at the innermost end" of each aperture to prevent the movable members passing through is referred to on page 2 lines 98 to 102 of GB 1574911. The prior documents do not expressly refer to the avoidance of mutual contact of the balls, but it would appear that the lips in fact serve that purpose. This view is reinforced by page 4 lines 95 to 107 which states that

"it is also possible to prevent inward dropping out of the clamping balls 12 by using clamping balls of such large diameter that they contact each other over inwardly facing surfaces when no screw is in the chuck",

which implies that the "constricted" embodiment is an alternative to this and thus avoids contact between the balls. Fig. 5 of DE 1603888 also shows constrictions in the apertures, and refers to these constrictions, at page 9, lines 22-27 of the translation by saying that the balls

"cannot fall inwards even if they are fewer in number than would be necessary for a self-holding ring of balls (see Fig. 4)."

Since Fig. 4 shows mutually contacting balls, it is again implied that the construction of Fig. 5 is an alternative construction and avoids such mutual ball contact. I therefore consider that both prior patent documents disclose the subject-matter of Claim 7 and that Claim 7 falls.

Claim 8 refers to an inner conical surface in the outer sleeve member, and is clearly disclosed by the surfaces 17 and 18 in GB 1574911 and by the surfaces 3 and 4 in DE 1603888 and thus falls. Claim 9 refers to the conical surface being stepped. Both GB 1574911 and DE 1603888 show a two-part tapered bore, with each part having a different taper angle, whereas the patent-in-suit shows a construction wherein two tapered bore portions are separated by a parallel portion 38. I accept that the reference to this step is to be interpreted as distinguishing the patentees' attachment from the prior art, but I need to consider whether the functions of the patentees' "stepped" tapered bore confer any advantages or distinctions over the two-stage tapered bores of the prior patents. The patentees assert in their counterstatement that the step enables the bit to be disengaged from the fastener head at commencement and completion of screwing-in in distinction to the prior documents without enlarging upon this feature. However, the patent itself on page 4 lines 21 to 24 merely refers to the ability to accommodate a wide range of screw shank diameters and is silent on the "advantage" of the stepped tapered bore as set out in the patentees' counterstatement. I do not consider that the stepped construction fulfils the function claimed for it in the counterstatement, since it is not clear how the intermediate parallel bore 38 can aid disengagement, which appears to depend upon the interaction between the outer sleeve and the adjustable stop. It is also not clear to me how the presence of a parallel bore aids or provides accommodation of different fastener shaft diameters. I therefore do not consider that Claim 9 is any more than a standard workshop modification.

Claim 10 indicates that the stop means is an axially adjustable cap, which is disclosed by Figs 3 and 4 and pages 3 lines 90 to 103 of GB 1574911 and also falls. Similarly, Claim 11, which refers to resilient bias between the stop means and the retaining means, is disclosed by Fig 1 of GB 1574911, which shows the springs 4 and 5 biasing the respective sleeves 1 and 2 of the retaining means away from the sleeve 3 and thus away from the adjustable cap. Exhibit FE2 also shows this construction. Furthermore, a spring 14 shown in the diagram of Exhibit FE2 acts on the cap to bias it rearwardly. Claim 11 therefore falls.

Claim 12 is an omnibus claim referring to the embodiments in the various drawings. The only features therein which appear to distinguish Figs 1 to 3 of the patent-in-suit from the prior art referred to and not already discussed are the hexagonal cross-sections of the removable bits 15 and corresponding recess, with an accompanying O-ring 17, and the mutually engaging formations in the bore of the adjustable stop cap 20 and the exterior of the support sleeve 16. Exhibit FE1 and the instructions set out under "Depht (sic) Adjustment" on the reverse side of Exhibit FE2 indicate that the adjustable stop cap and its support sleeve have such formations so as to enable the axial position of the cap to be set. The provision of hexagonal shafts for replaceable fastener driving bits is well known in this particular art as exemplified by the popular sets of plastics-handle driving tools with variable size sockets and allen keys, and moreover the patentees do not appear to place any emphasis on this feature. In this respect I consider that Claim 12 does not provide any construction which involves inventive merit over the prior documents and that Claim 12 falls.

I conclude that none of the claims of the patent-in-suit relates to a patentable invention. The Comptroller's normal practice following a finding of invalidity is to allow the patentee a period of time in which to propose amendments to remedy the invalidity. In this case however, the patentees have offered to surrender the patent, and moreover I can see no subject matter in the patent on which acceptable claims could be based. I therefore now revoke the patent-in-suit.

Since both parties have indicated that they are willing to bear their own costs I make no order as to costs.

Dated this 16 day of April 1991



W J Lyon

Superintending Examiner, acting for the Comptroller



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