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Datasheet for the decision of 27 October 2015

Case Number: T 2487/12 - 3.2.07

Application Number: 06002684.6

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Language of the proceedings: EN

Title of invention:
Impact tool

Patent Proprietor:
Makita Corporation

Opponent:
Black & Decker Inc.

Headword:

Relevant legal provisions:
EPC Art. 54, 84

Keyword:
Main Request - novelty (no)
Auxiliary Request I - clarity after amendment (no)

Decisions cited:
T 0607/93

Catchword:

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Case Number: T 2487/12 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 27 October 2015

Appellant: (Patent Proprietor)	Makita Corporation 11-8 Sumiyoshi-cho 3-chome Anjo-shi, Aichi-ken (JP)
Representative:	Kramer Barske Schmidtchen Patentanwälte PartG mbB European Patent Attorneys Landsberger Strasse 300 80687 München (DE)
Respondent: (Opponent)	Black & Decker Inc. 1207 Drummond Plaza Newark, DE 19711 (US)
Representative:	Bell, Ian Stephen Black & Decker Patent Department 210 Bath Road Slough Berkshire SL1 3YD (GB)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 5 October 2012 concerning maintenance of the European Patent No. 1690637 in amended form.**

Composition of the Board:

Chairman	H. Meinders
Members:	K. Poalas
	C. Brandt

Summary of Facts and Submissions

I. The patent proprietor (appellant) lodged an appeal against the interlocutory decision maintaining European patent No. 1 690 637 in amended form.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC (lack of novelty and inventive step).

III. The opposition division found that the subject-matter of claim 1 according to the second auxiliary request meets the requirements of the EPC.

IV. Oral proceedings before the Board took place on 27 October 2015.

The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted (main request) or, alternatively on the basis of Auxiliary Request I filed with letter dated 24 September 2015.

The respondent (opponent) requested that the appeal be dismissed.

V. The following documents of the opposition proceedings are relevant for the present decision:

E1: CN 1 575 932 A,
E1': Translation into English of E1 and marked up copies of figures 3 and 4.

VI. Claim 1 according to the main request reads as follows:

"An impact tool comprising:

a housing body (2), having a recess (22);
a motor (6), housed in the housing body at a rear side of the recess;
a hammer casing (8), housing a rotatable spindle (24) and an impact mechanism (30) operable to convert the rotation of the spindle (21) into intermittent impact actions in a first direction which is a circumferential direction of the spindle, and having an opened rear end, the hammer casing being mounted in the recess; and
a disk shaped member (13), coupled to the hammer casing (8) so as to close the opened rear end and to rotatably support the spindle (24), the disk-shaped member (13) having a through hole (16) receiving an output axis (5) of the motor (6), thereby causing the output axis of the motor to couple with the spindle to transmit a rotation of the motor to rotate the spindle;
characterised by:
a first engagement member (21), formed on an outer face of the disk-shaped member (13);
a second engagement member (23), formed on an inner face of the recess (22) and engaging with the first engagement member so as to restrict a movement of the hammer casing (8) in a second direction parallel to a rotation axis of the spindle (24);
a third engagement member (43; 45; 47), formed on an outer face of the hammer casing (8); and
a fourth engagement member (44; 46; 48), formed on an inner face of the housing body (2) and engaging with the third engagement member (43; 45; 47) so as to restrict a movement of the hammer casing (8) in the first direction".

Claim 1 according to Auxiliary Request I differs from claim 1 according the main request in that the expression

"such that the disk-shaped member is integrated with the hammer casing housing the impact mechanism as a unit such that the parts of the impact mechanism can be prevented from falling out even when the impact tool is disassembled for maintenance purposes"

has been introduced after the expression

"a disk shaped member (13), coupled to the hammer casing (8) so as to close the opened rear end".

VII. The appellant's arguments, in so far as they are relevant to the present decision, may be summarised as follows:

Claim 1 according to the main request – Novelty, Article 54 EPC

According to the features' analysis presented in the statement setting out the grounds of appeal the impact tool according to claim 1 comprises *inter alia* the following features:

A4 a disk-shaped member 13, coupled to the hammer casing 8,
A4-1 so as to close the opened rear end,
A4-2 [so as] to rotatably support the spindle 24,
A4-3 the disk-shaped member 13 having a through hole 16 receiving an output axis 5 of the motor 6, thereby causing the output axis of the motor to couple with the spindle to transmit a rotation of the motor to rotate the spindle,
A5 a first engagement member 21 formed on an outer face of the disk-shaped member 13,
A6 a second engagement member 23, formed on an inner face of the recess 22,

A6-1 engaging with the first engagement member so as to restrict a movement of the hammer casing 8 in a second direction parallel to a rotation axis of the spindle 24.

The skilled person understands feature A4 in the context of the whole claim in combination with the object to be achieved, as mentioned in lines 45 to 48 of column 2 of the patent in suit, and with the description of the effect of features A4 and A4-1 mentioned in lines 31 to 38 of column 3 of the patent in suit in the sense that the term "coupled" in feature A4 requires an **integral** coupling and **does not cover** an **indirect** coupling between the disk-shaped member and the hammer casing, such as via third means. Said coupling is not present during assembling and disassembling of the impact tool.

Features A5 and A6 require the presence of first and second engagement members 21, 23 on the disk-shaped member 13, respectively the recess 22 of the housing.

Feature A6-1 requires that the first and second engagement members 21, 23 engage with each other so as to restrict a movement of the hammer casing 8 in a second direction parallel to a rotation axis of the spindle.

Features A4, A5 and A6 all together provide the claimed coupling.

As a result, the disk-shaped member 13 and the recess 22 of the housing 2 engage so as to restrict a movement of the hammer casing 8 in the second direction, which in turn establishes the effect of the coupling of feature A4 in the second direction.

From the figures of the patent in suit it is clear to the person skilled in the art that in the impact tool depicted therein the mere engagement of the disk-shaped member 13 and the recess 22 of the housing 2 cannot restrict the movement of the hammer casing 8 in the second direction without the coupling according to feature A4.

According to figures 2 and 3 of E1 the engagement of the housing body (main body housing) 5 and the disk-shaped member (mounting platform) 9 does not restrict a movement of the hammer casing (case) 4 in the second direction. It is the engagement of the housing body 5 and the hammer casing 4 which restricts such a movement. Such an engagement is independent of the presence of the disk-shaped member 9. Even if the disk-shaped member 9 were not present, the **direct** engagement between the housing body 5 and the hammer casing 4 would provide the claimed effect.

Even if the disk-shaped member 9 could serve as an abutment stopper for the hammer casing 4, which it cannot do due to the engagement between the housing body 5 and the hammer casing 4, this is not the claimed restriction. If there were no direct engagement between the housing body 5 and the hammer casing 4, the disk-shaped member 9 could be pulled out of the hammer casing 4. This is **not** a coupling.

If there exists only an abutment between the hammer casing 4 and the disk-shaped member 9, there is no forwards as well as backwards restriction of the hammer casing's movement in the second direction parallel to a rotation axis of the spindle according to feature A6-1 in E1.

The couplings allegedly implied by the wording "snap-fit" in E1' must be due to an incorrect translation from Chinese into English. Furthermore, a "snap-fit" connection is not physically possible in E1 because there are too many consecutive pieces to be snap-fitted to each other.

It is not the appellant's duty to provide, at its expense, a correct translation of E1.

Claim 1 according to Auxiliary Request I - clarity, Article 84 EPC

Paragraph [0014] of the patent in suit, which is the basis for the features introduced into claim 1, specifies the coupling between the casing and the disk-shaped member as being an integral coupling.

The specific screw coupling according to [27] of the patent in suit refers only to a preferred embodiment of the present invention having no limiting effect on the general teaching disclosed in [14].

The person skilled in the art immediately understands that one possibility for realising a coupling according to the additional features of claim 1 is a screw connection according to [27] of the patent in suit.

VIII. The respondent's arguments, in so far as they are relevant to the present decision, may be summarised as follows:

Claim 1 according to the main request - Novelty, Article 54 EPC

Feature A6-1 does not require that the movement

restriction of the hammer casing occurs due to the coupling between the disk-shaped member and the hammer casing according to feature A4; there is no technical link between the set of features A4 and the set of features A5 and A6.

E1' clearly states that there is a connection between the disk-shaped member 9 and the stepped component 30 which forms a snap-fit component to restrict the forward-reverse movement of disk shaped member relative to the hammer casing, see E1', paragraph bridging pages 11 and 12 and the first complete paragraph on page 12. In E1, there is further a connection between the disk shaped member 9 and the hammer casing 4 due to the disk shaped member 9 engaging with the stepped component 30 on casing 4. It is clear from the figures of El alone that the rearward movement (to the right in Figure 3 of El) of the hammer casing 4 is prevented by this engagement and therefore its movement is restricted by the disk-shaped member in the second direction. As such the connection of the disk-shaped member 9 and the recess due to the snap fit components 33, 34 results in the restriction of the movement of the hammer casing in the second direction relative to the recess and the disk-shaped member 9.

No better translation of E1 has been submitted by the appellant. The burden of proof that the English translation used by the opposition division is not correct lies with the party appealing the opposition division's decision.

Claim 1 according to Auxiliary Request I - clarity, Article 84 EPC

The term "integrated" introduced into claim 1 is a very

broad term and the additional features of claim 1 define only an effect to be achieved without specifying the means for achieving this effect.

Reasons for the Decision

1. *Claim 1 according to the main request – Novelty, Article 54 EPC*

1.1 The question at stake is whether in E1 the disk-shaped member (mounting platform) 9 is **coupled** to the hammer casing (case) 4 according to feature A4 of the appellant's feature analysis, see point VII above.

1.2 The Board, following the arguments of the respondent, considers that the two different sets of features of claim 1, namely features A4, A4-1, A4-2 and A4-3 on the one hand and features A5, A6 and A6-1 on the other hand, define **two different types of connections**, namely on the one hand a **coupling** between the disk-shaped member and the hammer casing and on the other hand an **engagement** between (a part of) the disk-shaped member and (a part of) the housing body. No synergy between said two different connections is claimed in claim 1. Accordingly, when evaluating novelty of the subject-matter of claim 1 it has to be assessed whether such connections are each also present in the impact tool known from E1. They do not need a combinatory effect.

1.3 The Board follows the appellant stating in the fourth paragraph of page 4 of its statement setting out the grounds of appeal that in the present case the claimed term "coupled" relates to a mechanical connection of different parts, said connection being capable of transmitting forces and/or preventing separation of the connected parts. Such connection is obviously realised

via "coupling means" connecting the corresponding parts.

1.4 As far as the disclosure of E1 is concerned, the Board considers that irrespective of the question whether the snap-fitting mentioned in the first complete paragraph on page 12 of E1' is an adequate translation of the corresponding passage in E1, what is important in this respect is the general technical teaching derived from E1/E1' by the person skilled in the art.

1.5 It is undisputed that in the impact tool of E1 there are form fits between the hammer casing (case) 4 and the housing body (main body housing) 5 providing "force transmitting connection" and also preventing separation of said two parts in the second direction, see figures 2 and 3 of E1 and the last complete paragraph on page 9 of the statement setting out the grounds of appeal. Accordingly, said parts are coupled to each other in the sense meant by the appellant.

1.6 It is further clear to the person skilled in the art from figure 3 of E1 that the form fits between the inwardly extending components 31, 33 of the housing body 5 and the recess 34 on an outer face of the disk-shaped member 9 prevent separation of the housing body 5 and the disk-shaped member 9 in the second direction and thus keep said two parts coupled with each other, again in the sense meant by the appellant.

1.7 From the above follows that there exists a mechanical connection, namely the housing body 5, preventing separation of the disk-shaped member 9 from the hammer casing 4 and that thus the disk-shaped member 9 is coupled to the hammer casing 4 according to feature A4

of claim 1.

1.8 The fact that features A4-1, A4-2 and A4-3 are known from E1 has not been disputed by the appellant.

1.9 It is further undisputed that the recess 34 on an outer face of the disk-shaped member 9 corresponds to the first engagement member according to feature A5 and that the component 33 of the housing body 5 inwardly extending into the recess 34 corresponds to the second engagement member according to feature A6 of claim 1.

1.10 According to figures 2 and 3 of E1 the disk-shaped member 9 is with its front part in contact with the stepped component 30 of the hammer casing 4 and with its rear part in contact with the inwardly extending component 33 of the housing body 5.

1.11 From the above it follows that the above-mentioned engagement between the disk-shaped member 9 and the housing body 5, due to the abutment between the front face of the disk-shaped member 9 and the stepped component 30 of the hammer casing 4, obstructs, i.e. restricts an inward movement of the latter in the (second) direction parallel to the rotation axis of the spindle, namely to the right in figure 3 of E1. Accordingly, also the engagement according to features A5, A6 and A6-1 of claim 1 is known from E1.

1.12 In the wording of the features or the structure of claim 1 the Board cannot find any hint in the sense that the movement restriction of the hammer casing according to feature A6-1 has to be provided by the coupling according to feature A4, whereby said coupling has to be a "direct coupling" between the disk-shaped member and the hammer casing, as argued by the

appellant. The appellant refers to the corresponding parts of the description concerning the object to be achieved by the present invention and the effect of features A4 and A4-1. Claim 1 would have to be read in a limited sense of the presence of an interrelation between the coupling according to feature A4 and the movement restriction of the hammer casing according to feature A6-1.

1.13 Following the approach of T 607/93, not published in OJ EPO, point 2.2 of the reasons, the Board considers that if features of a claim (in that case a broad claim) do not require interpretation because they are clear in themselves and in their relation to each other, the Board can restrict its assessment of the meaning of said features and their relation to each other to the wording used in the claim for these features and to the structure of the claim. That is the case here and there is no reason to use the description to interpret the claim more narrowly. The Board sees no need to read into claim 1 such limitations as derived from the description.

1.14 As far as it concerns the appellant's objection that the "snap-fitting" as mentioned in several paragraphs of E1' is not an adequate translation of the corresponding passage in E1, this is not decisive. The Board has concentrated on the general technical teaching derived from E1/E1' by the person skilled in the art, see points 1.4 to 1.11 above, without taking this feature into consideration.

1.15 There is therefore no need for clarification whether E1' is an adequate translation into English of E1 in this respect, with regard to the coupling defined therein as being in the form of snap-fitting, and

whether the burden of proof for an adequate translation lies on the appellant or not.

1.16 For the above-mentioned reasons the subject-matter of claim 1 is not novel over the impact tool of E1/E1' and the requirements of Article 54 EPC are not met.

2. *Claim 1 according to Auxiliary Request I - clarity, Article 84 EPC*

2.1 According to the established jurisprudence of the Boards of Appeal the claims per se must be free of contradiction and clear in themselves when read by the person skilled in the art, without any need of reference to the content of the description, see Case Law of the Boards of Appeal of the EPO, 7th edition 2013, II.A.3.1, first paragraph. In the present case these requirements are not met for the following reasons.

2.2 The start of the fifth paragraph of claim 1 according to Auxiliary Request I reads as follows (the introduced features being depicted in bold):

"a disk-shaped member (13), coupled to the hammer casing (8) so as to close the opened rear end **such that the disk-shaped member is integrated with the hammer casing housing the impact mechanism as a unit such that the parts of the impact mechanism can be prevented from falling out even when the impact tool is disassembled for maintenance purposes**, and to rotatably support...".

2.3 The Board follows the respondent arguing that the features introduced into claim 1 describe a specific effect to be achieved due to the claimed coupling between the disk-shaped member and the hammer casing,

namely the disk-shaped member **being integrated** with the hammer casing housing the impact mechanism **such that the parts of the impact mechanism** can be **prevented from falling out** even when the **impact tool is disassembled** for maintenance purposes, without defining the coupling means for achieving this particular effect.

2.4 It is true that a specific coupling between the disk-shaped member and the hammer casing is described in [27] of the patent in suit, in the form of a female thread formed on an inner periphery of the open rear end of the hammer casing and a male thread formed on an outer periphery of the front end of the disk-shaped member. This is a coupling which can be unscrewed, which is necessary for the claimed disassembly of the impact tool. However, this is in contradiction with the term "integrated", which (also) requires a connection between these two parts which makes them "one whole", i.e. **not** detachable. The two above-mentioned requirements of claim 1, namely having all parts of the impact tool disassembled and at the same time keeping at least two parts of the impact tool, namely the disk-shaped member and the hammer casing, integrated with each other, preventing thereby the parts of the impact mechanism housed within said unit from falling out, are technically incompatible with each other, introducing a contradiction into claim 1, rendering it thereby unclear. The requirements of Article 84 EPC are therefore not fulfilled.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Nachtigall H. Meinders

Decision electronically authenticated