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Datasheet for the decision of 1 July 2015

Case Number: T 1420/14 - 3.2.01

Application Number: 10186079.9

Publication Number: 2295299

IPC: B60S5/04, B60C29/06, B29C73/16

Language of the proceedings: EN

Title of invention:
Kit for inflating and repairing inflatable articles, in particular tyres

Patent Proprietor:
Tek Global S.r.l.

Opponents:
Active Tools A/S
Active Tools Europe GmbH

Headword:

Relevant legal provisions:
EPC 1973 Art. 100(c), 56

Keyword:
Amendments - added subject-matter (no)
Inventive step - (yes)

Decisions cited:

Catchword:

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Case Number: T 1420/14 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 1 July 2015

Appellant: (Opponent 1)	Active Tools A/S Otto-Hahn-Strasse 72 32108 Bad Salzuflen (DE)
Representative:	Tergau & Walkenhorst Patentanwälte - Rechtsanwälte Patentanwälte - Rechtsanwälte Eschersheimer Landstrasse 105-107 60322 Frankfurt/Main (DE)
Respondent: (Patent Proprietor)	Tek Global S.r.l. Via Icaro, 11 61100 Pesaro (IT)
Representative:	Bergadano, Mirko Studio Torta S.p.A. Via Viotti, 9 10121 Torino (IT)
Party as of right: (Opponent 2)	Active Tools Europe GmbH Otto Hahn Straße 72 32108 Bad Salzuflen (DE)
Representative:	Tergau & Walkenhorst Patentanwälte - Rechtsanwälte Patentanwälte - Rechtsanwälte Eschersheimer Landstrasse 105-107 60322 Frankfurt/Main (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 30 April 2014 rejecting the opposition filed against European patent No. 2295299 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	G. Pricolo
Members:	W. Marx
	S. Fernández de Córdoba

Summary of Facts and Submissions

I. On 27 June 2014 an appeal was filed by opponent 1 against the decision rejecting the opposition against European patent No. 2 295 299.

II. In its decision the opposition division had held that the granted patent, based on a divisional application stemming from PCT application PCT/IB2005/000309, published as WO2005/085028, met the requirements of Article 76(1) EPC and that the subject-matter of independent claim 1 involved an inventive step with respect to, *inter alia*, document E6 (WO03/041949) in combination with:

E2: US Des. 298,832; or
E3: US Des. 295,754; or
E4: US Des. 275,291.

III. Together with its grounds of appeal dated 28 July 2014 the appellant (Active Tools A/S) filed a set of documents (E7) relating to the appellant's "Airman - Falcon" kit, in particular:

E7.1: Invoice dated 3 April 2000 covering the sale of one AirMan Falcon MX650 to Ambassade Austria, Grillenberg, Austria
E7.2: Packaging information of AirMan Falcon MX650 dated 31 May 2000
E7.3: Page (in German) of AirMan Falcon manual
E7.4: Page 31 of catalogue advertising AirMan Falcon
E7.5: Invoice dated 26 April 2000 covering the sale of 250 AirMan Falcon MX850 kits to Keyman Int. Co., Moscow, Russia
E7.6: Extract from the DPMA Register of German design No. 49904812-0001 published 25 September 1999
E7.7: Affidavit by Mr. Peter Engelund

E7.8: Photographs of AirMan Falcon kit

IV. On 17 December 2014, an intervener (Active Tools Europe GmbH) filed a notice of intervention under Article 105(1) EPC, referring to a request for preliminary injunction by the patent proprietor for alleged infringement before the District Court of Mannheim, along with a reasoned statement which corresponds in essence to the statement of grounds of appeal filed by opponent 1.

V. With letter dated 16 March 2015 the intervener submitted a further set of documents (E7.9) to prove the alleged prior use of the "AirMan - Falcon" kit, in particular various orders, pro forma invoices, sales confirmations and delivery notes.
The intervener also filed a set of documents E8 that showed that the inflating AirMan Falcon kit was also sold, in combination with a sealant container, as the "Fill & Go" repair kit from Dunlop.

VI. Oral proceedings before the board took place on 1 July 2015.

The appellant (opponent 1) and the intervener (opponent 2) requested that the decision under appeal be set aside and that the European patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed.

VII. Claim 1 as granted reads (broken into a feature analysis according to the contested decision):

(1) A kit for inflating and repairing inflatable articles, in particular, tyres;

(2) the kit comprising a compressor assembly (2),
(3) a container (3) of sealing liquid,
(4) first connecting means (4, 5) for connecting the container to the compressor assembly (2) and to an inflatable article for repair or inflation,
(5) an outer casing (6) housing said compressor assembly (2) and defining a seat (7) for the container (3) of sealing liquid,
(6) said container (3) being housed removably in said seat (7),
(7) and second connecting means (4, 40) for stably connecting said container to said compressor assembly (2), so that the container, when housed in said seat (7), is maintained functionally connected to said compressor assembly (2),
(8) wherein said first connecting means (4, 5) comprises a third connecting means in the form of first hose (4) or a feed line connecting the container (3) to the compressor assembly (2)
(9) and a fourth connecting means in the form of a second hose (5) connected to said container (3) and connectable to a valve of the inflatable article to repair the inflatable article,

characterized in that

(10) said fourth connecting means hose (5), when not in use, is wound about said outer casing (6) and housed inside a peripheral groove (56) of said casing (6).

VIII. The appellant's arguments and the arguments provided in addition by the intervener, insofar as relevant to the present decision, may be summarised as follows:

The contested patent was filed as a divisional application of EP 2 067 674 ("parent application"), which in turn was a divisional application of

EP 1 723 016, filed as PCT application WO2005/085028 A1 ("root application"). The disclosure in the patent had to be derivable directly and unambiguously from each earlier predecessor application (see G 1/06).

According to feature (7), a second (stable) connecting means between the container and the compressor assembly was claimed. In the present case, neither the parent application nor the root application disclosed two connecting means connecting the container to the compressor assembly. The documents as originally filed showed just one single connecting means between the container and the compressor assembly, namely a hose 4, which was not suitable for providing a stable connection and which already formed part of the first connecting means. Adaptor unit 40 did not provide a direct connection to the compressor assembly and could not be deemed to form a second stable connecting means between the container and the compressor assembly.

The expression "in the form of first hose (4) or a feed line" in feature (8) was aimed at protecting feed lines in general, which were not designed as hoses, which was not originally disclosed (see Figures 1 to 4 and the description). The sole feed line disclosed in the description was explicitly said to be a hose (page 10, lines 19 to 20 of the root application). Only in claim 2 was the term "feed line" used without referring to a hose. However, claim 2 defined in detail the connection between the compressor and the container. Therefore, the term "feed line" was only disclosed in originally filed claim 2 and in claim 3 in combination with further features.

The opposition division found that E6 disclosed all the features according to the preamble of claim 1. Users of

kits for inflating and repairing inflatable articles have always faced the problem of how to stow the hose. As regards feature (10), E6 showed an alternative solution for storing the fourth connecting means (see page 13, third paragraph), namely a hose separated from the sealant container and accommodated in a chamber or an opening (see Figure 9). The apparatus according to the contested patent provided the advantage that the hose, when not in use, could be stowed without separating it from the container. In this way, one work step was avoided, and leakage of the remaining sealant fluid from the hose could be prevented. A skilled person looking for a simple, fast and clean storing alternative for the hose would find the inflating "AirMan - Falcon" kit according to E7. This kit did not comprise a container of sealant liquid, but still belonged to the same technical field of the present invention. E8, which showed both a kit for inflating and a kit for inflating and repairing, was submitted to show that this was indeed the case. According to the packaging information of E7.2, the hose was stowed in a peripheral groove of the casing when not in use (see also E7.4 and E7.8). The skilled person would recognise that the hose could easily be stowed in the assembled state and therefore arrive without the exercise of an inventive step at claim 1 of the contested patent.

Moreover, documents E2 to E4 also showed alternative ways of storing the hose or the electric cable, which was stowed inside a peripheral groove of the casing when not in use. It was of no importance that a supporting base was placed below the groove, because claim 1 was silent on the exact position or course of the peripheral groove, so feature (10) was derivable, without further technical information, from design patents E2 to E4.

IX. The respondent (patent proprietor) argued essentially as follows:

As discussed in the grounds of the contested decision, the wording "first connecting means" or "second connecting means" was used for the sake of clarity, to distinguish between a mechanical connection and a fluid connection. Furthermore, the terms "feed line" and "hose" were both explicitly recited in the description of the application as filed, one being a general term and the other a specific term relating to a preferred embodiment. Claim 2, for example, recited that connecting means for repair or inflation comprised a fluid line. The issue of connecting the compressor to the sealant container was unrelated to the fact that the container comprised a vessel and a valve device (further content of claim 2).

At the priority date of the contested patent, different configurations for stowing the sealant hose were known, and there was quite an open field for designers of tyre repair kits. The advantage of a configuration of the kit according to claim 1, i.e. in which the sealant hose is housed inside a peripheral groove of the casing when the sealant container was housed in the seat, was that it was ready to use immediately before performing sealant injection. The invention according to the present patent is based on the recognition that this advantage was of utmost importance for convincing users to opt for the kit instead of the spare tyre. E6 was silent on the issue of ease of use and taught the contrary, because the hose was disconnected from the container and housed inside the casing, i.e. stowed in a dedicated compartment, when not in use. Even if the alleged prior use (E7) was taken into consideration, it

did not convey a specific teaching for the skilled person. There was no possibility for the skilled person to have found a hint from a product where the sealant container was absent, e.g. from a sole compressor. The reference to prior art documents relating to compressors was based on hindsight. This also held, were E8 to be admitted into the proceedings, where the compressor was associated with a self-standing sealant container and the sealant hose unrelated with the compressor. In both E7 and E8, users had to handle a separate container, which was more complicated than the claimed solution. A corresponding view was taken by the Higher Regional Court of Düsseldorf and the Regional Court of Mannheim in national proceedings relating to the patent in suit. Design documents E2 to E4 related to several embodiments of sole compressors, so the same arguments applied. Moreover, it was questionable whether E2 to E4 disclosed a groove.

Reasons for the Decision

1. Added subject-matter (Article 100(c) EPC 1973)

1.1 The subject-matter of the contested European patent, filed as a divisional application of European patent application No. 09156222.3 ("parent application", published as EP 2 067 674 A1), which in turn was a divisional application of European patent application No. 05702451.5 (publication No. EP 1 723 016 A1), filed as PCT application published as WO2005/085028 A1 ("root application"), is disclosed in each of the preceding applications in the sequence as filed. This is in accordance with the ruling in decision G 1/06 (OJ EPO 2008, 307, headnote), relating to the compliance of

divisional applications with the second sentence of Article 76(1) EPC 1973, the same requirement existing under Article 100(c) EPC 1973 for a patent granted on a divisional application.

1.2 The appellant and the intervener contested that a second (stable) connecting means according to feature (7) was disclosed in the parent application and in the root application, which showed just one single connecting means (hose 4) between the container and the compressor assembly. Moreover, the hose 4 was allegedly not suitable for providing a stable connection and in any case formed part of the first connecting means, and the adaptor unit 40 did not provide a direct connection to the compressor assembly and could not be deemed to form a second stable connecting means between container and compressor assembly.

Except for the terms "first" and "second", identical wording to that in features (4) and (7) can be found in independent claim 1 of both the parent and the root application. When comparing the two connecting means, the board finds that this independent claim 1 clearly specifies two different connecting means:

- The first of these, the connecting means corresponding to feature (4), i.e. "connecting means for connecting the container to the compressor assembly and to an inflatable article for repair and inflation", specifies the layout of the fluidic circuitry, comprising two sections viewed from the container as the source of the sealant liquid (container - compressor assembly, container - inflatable article), in accordance with features (8) and (9), which further specify that "said first connecting means comprises a third connecting means ... and a fourth connecting

means ...". This connecting means provides the repair function of feature (9), i.e. it feeds sealant liquid into the tyre when the compressor is started.

- The second, the connecting means corresponding to feature (7), i.e. "connecting means for stably connecting said container to said compressor assembly, so that the container, when housed in said seat, is maintained functionally connected to said compressor assembly", specifies that the compressor assembly and the container (which according to features (5) and (6) is housed removably in a seat of the outer casing housing the compressor assembly) are stably and functionally connected when the removable container is housed in the seat. Thus, in addition to a mere definition of the fluidic circuitry or layout, a connection is specified which also provides a stable connection between the removable container and the compressor assembly, i.e. which addresses in addition mechanical characteristics of the connection between the container and the compressor assembly ("stably connecting ... when housed in said seat"). To this effect, it is not required that the connecting means is formed solely by the hose 4 and that the hose 4 has to provide a stable connection, as contested by the appellant and the intervener, because the term "stably connecting" combines a layout definition ("connecting", as realised, for example, by the hose 4) with a mechanical characteristic ("stably", which might be realised by means other than the hose 4). Although reference signs are not considered limiting, such interpretation is consistent with the reference signs 4 and 40 used for the second connecting means in granted

claim 1, because (see Figures 1 to 6 of the contested patent) the hose 4 functionally connects the container to the compressor assembly, whereas both parts are connected stably by means of an adaptor unit 40.

Due to these two non-identical definitions of connecting means in claim 1 of both the parent and the root application, the introduction of the terms "first" and "second" in granted claim 1 is considered to express nothing more than a mere numbering for different connecting means, which does not add new technical information.

Such different connecting means might comprise elements which form part of both connecting means, such as the hose 4 in the contested patent. Moreover, a connecting means might be composed of different parts in order to achieve different characteristics, such as the hose 4 and the adaptor unit 40 achieving a functional and at the same time stable connection. Stability might be provided by means other than the hose 4, e.g. by the adaptor unit 40. However, the wording of claim 1 does not require that a single part, such as the adaptor unit 40, has to provide a direct connection of the container to the compressor assembly, but the connection might be established by the combination of the hose 4 and the adaptor unit 40.

In particular, the board finds that granted claim 1 does not, as argued by the appellant and the intervener, simply specify two connecting means connecting the container to the compressor assembly, which might be contradictory to the disclosure of a single hose 4 in the parent or root application. The wording of features (4) and (7) makes it clear that the

first and second connecting means according to granted claim 1 do not specify a redundant or parallel design of a fluidic connection between the container and the compressor assembly.

The board therefore concludes that the two connecting means as already specified in the earlier applications relate to different, non-identical connecting means. This justifies the addition of the term "second" in feature (7) without violating Article 100(c) EPC 1973.

1.3 The appellant and the intervener also objected to the alternative "feed line" introduced into feature (8), because feed lines in general, which were not designed as hoses, were not originally disclosed in the description, and because this feature was disclosed in claim 2 only in combination with further features.

Claim 2 according to the parent application and also according to the root application reads as follows: "A kit as claimed in Claim 1, characterized in that said **connecting means** comprise a compressed-air feed line (4) for feeding compressed air from said compressor assembly (2) to said container (3); said **container** (3) comprising a vessel (15) having an opening (17), and a valve device (18) fitted in fluidtight manner to the opening (17) and having an inlet (27c) connectable to said compressed-air feed line (4), and an outlet (29a) for the sealing liquid."

A first set of features in claim 2 relates to the connecting means ("comprising a compressed-air feed line") and a second set of features specifies in more detail the container ("comprising a valve device ... connectable to said compressed-air feed line").

As regards the first set of features, the term "compressed-air feed line" is synonymous with a "line for feeding compressed-air", so the first set of features of claim 2 contains redundant formulations. Without extending the subject-matter of claim 2 as filed in the earlier applications, one of the redundant terms (e.g. the term "compressed-air feed") could therefore be deleted. Moreover, a "line for feeding compressed air" designates a line **suitable** for feeding compressed air, as provided by a line connecting the container to a compressor, i.e. to a device which delivers or "feeds" a compressed medium like air. Since feature (8) ("third connecting means ... connecting the container to the compressor assembly") already comprises such a specification, the incorporation of the first set of features of original claim 2 into claim 1 results in the concisely formulated second alternative of a "feed line" according to feature (8) of granted claim 1.

The second set of features of original claim 2 specifies in more detail the container ("comprising a vessel ... and a valve device") and is considered structurally and functionally independent from the first set of features relating to the connecting means between the container and the compressor assembly. The board therefore concludes that the omission of the second set of features when amending claim 1 on the basis of original claim 2 - identical in both the root and the parent application - does not amount to an unallowable intermediate generalisation.

Since claim 2 of the earlier (parent and root) applications contains a basis for the general disclosure of a feed line according to feature (8), it can be left open whether a further basis can be found

elsewhere in the original description. The board therefore concludes that feature (8) also meets the requirements of Article 100(c) EPC 1973.

1.4 Hence, the subject-matter of the European patent does not extend beyond the parent and the root application as filed.

2. Inventive step (Art. 56 EPC 1973)

2.1 It is not disputed that the closest prior art as disclosed by document E6 does not disclose the characterising feature (10). E6 shows an alternative solution for storing the fourth connecting means, i.e. the hose connected to the container and connectable to a valve of the inflatable article (as specified by feature (9)), which in E6 is accommodated in a chamber or an opening (see page 13, third paragraph; Figure 9).

According to feature (10) of granted claim 1, the hose, when not in use, is wound about the outer casing and housed inside a peripheral groove. In comparison with E6, this solution according to the contested patent provides an alternative way of stowing the hose when not in use. Users of kits for inflating and repairing inflatable articles might always have faced the problem of how to stow the hose, as argued by the appellant and intervener, i.e. they might be tempted to look for alternative solutions. However, it needs to be assessed whether, knowing this problem, they would arrive in an obvious manner at the claimed solution. Even assuming that the hose in E6, as alleged, has to be disconnected for stowage, the board is not convinced that stowing a hose by winding it about the outer casing and - at the same time - housing it inside a peripheral groove is

faster or simpler than just storing the hose in a separate chamber as known from E6, as asserted by the appellant and the intervener. Therefore, in the board's judgement, the problem to be solved simply resides in providing an alternative way of stowing the hose which is connectable to a valve of the inflatable article.

2.2 The skilled man looking for alternative ways of stowing the hose known from E6 might come across design patents E2 to E4, which relate to air compressors. However, E3 and E4 only show an electric cable wrapped around the device in a gap formed between the compressor casing and a support foot, i.e. they give no hint on how to stow the hose of the compressor. In E2, a hose of the compressor is wrapped around the device in a gap formed between the compressor casing and a supporting foot, and the board is not convinced that the casing of E2 shows a peripheral groove housing said hose. But, above all, the board cannot see that the skilled person, starting from E6, would be tempted to modify the box or casing in E6 by providing, instead of the recessed area shown in E6 (see Figure 9, which is referred to in the description as a chamber 40 or opening), a peripheral groove for housing the hose. The casing in E6 represents a flat box of substantially rectangular shape and compact design, having a smooth surface without protruding parts (except perhaps for the flat circular manometer). Such design suggests a specific handling action, namely to place the box either on the flat upper or lower surface (see Figures 8 and 9), depending on whether the manometer on the upper side should be visible when inflating/repairing a tyre, or whether the hose should be stowed in the opening when not in use. Since E6 represents a complete solution for a kit of the claimed type, having a dedicated chamber for stowing the hose, the provision of peripheral

grooves in the casing of E6 for housing the hose is not an obvious alternative which the skilled person would consider without having knowledge of the claimed invention. Moreover, E6 proposes an alternative (see page 13, paragraph 4) to the open chamber for storing the hose, namely that "the chamber 40 can be provided with a detachable covering or door".

2.3 Under the assumption that the allegedly prior-used inflating "AirMan - Falcon" kit according to E7 was effectively available to the public and that it belongs to the same technical field of the patent in suit (although E7 does not comprise a container of sealant liquid), the skilled person could have gathered from E7 the information with regard to stowing the hose in a peripheral groove of the casing of the inflating kit. However, for the same reasons as mentioned above in paragraph 2.2, the board takes the view that, starting from E6, the skilled person would not have been tempted, in view of the problem posed, to modify the casing of E6 by providing a peripheral groove for housing the hose, which in E6 is stored in a chamber or an opening when not in use. A similar reasoning applies for the allegedly prior-used kit in accordance with E8, under the assumption that the latter is effectively part of the prior art. E8 does indeed show the inflating kit according to E7 in combination with a separate sealant container. The sealant container, which has a hose connectable to a valve of the inflatable article, can be connected to the inflating kit (compressor) via an air hose (see E8.3, "Funktion Fill & Go Comfort"), which is stowed in a peripheral groove of the casing of the inflating kit as in E7.

It follows from the above that, even if it were acknowledged that kits in accordance with E7 and E8

effectively belong to the state of the art, this would not justify a different conclusion in respect of inventive step. Accordingly, the objection to the admissibility of the alleged prior uses raised by the respondent is a moot point, and, also, there is no need to address the issue of the public availability of the prior uses.

2.4 Since the objection of lack of inventive step was based on taking only document E6 as the closest prior art, the board concludes that the subject-matter of claim 1 involves an inventive step within the meaning of Article 56 EPC 1973. Since claims 2 to 14 contain all the features of claim 1, the same conclusion applies to the subject-matter of these claims as well.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Vottner G. Pricolo

Decision electronically authenticated