

US2001/0045371. Keter's Evidence Statement (filed on 21 March 2017) included a copy of the decision of the Frankfurt am Main Regional Court in Germany, two reports from an independent expert appointed by the Italian Court, dated June 2013 and October 2013, the English translations of these three documents, plus further documents from the EPO appeal proceedings.

- 5 Dolleymores' Evidence-in-Reply (filed on 2 May 2017) consisted of a witness statement from Philip Forrest Smith and a printed copy of a website for a plastic bowl with rolled edges which is available for purchase. Keter requested that the Evidence-in-Reply be struck out of the proceedings because: (i) it was not strictly in reply to the defendant's evidence, (ii) it consisted of newly filed expert evidence and (iii) the witness expressed opinions on matters which are for the Tribunal to decide and referred to additional documents which have not been filed previously. Dolleymores subsequently withdrew the witness statement from Philip Forrest Smith and replaced it with a witness statement from Rupert Knights (filed on 22 May 2017), the admissibility of which was to be decided at the hearing.
- 6 At the hearing, Keter objected to the inclusion of the new witness statement giving the reasons that Mr Knights has given evidence on his opinion and that such opinion should be in the form of expert evidence, and also that the evidence relates to claims 5-7 which are not considered to be independently valid. Upon learning that claims 5-7 were not considered by Keter to be independently valid, Dolleymores agreed that the witness statement did not require any more consideration.

The patent

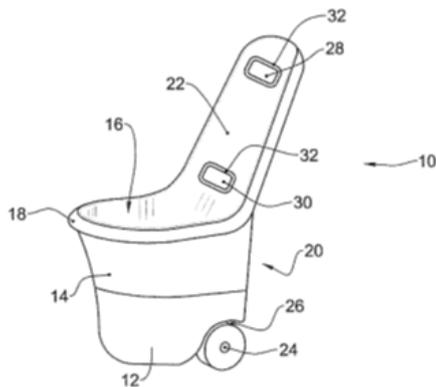


FIG. 1

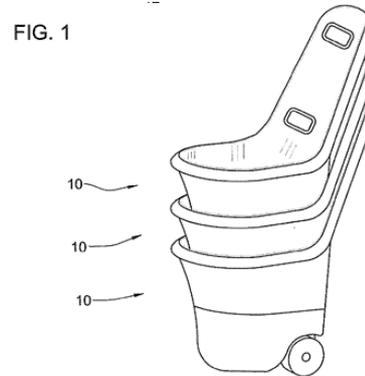
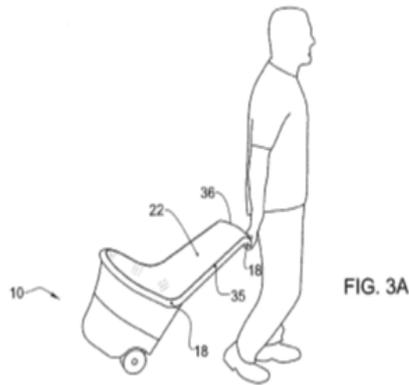


FIG. 2

- 7 The invention relates to a bucket, as shown in fig.1 above, comprising a bottom portion 12, vertical sidewalls 14 extending upwardly from the bottom portion and defining a bucket interior 16, and an upper rim 18, which is a downwardly curved extension of the top of the sidewalls. The bucket 10 further comprises, at a back face 20 thereof, an upwardly extending portion 22, which is a smooth continuation of the sidewall 14 at the back face. The bucket 10 further comprises, adjacent the bottom portion 12 and the back face 20, two wheels 24. The sidewalls 14 further comprise recesses 26 in the location of the wheels 24. The recesses 26 are sized so that the wheels 24 do not project beyond the bottom portion 12 or sidewalls 14, except as necessary for the bucket 10 to be rolled, so as not to interfere with the ability of the bucket 10 to nest with other identical buckets, as seen in fig. 2 above.



- 8 The upwardly extending portion 22 is preferably of such a height so as to allow a user to grasp the first aperture 28 or the rim at the top edge 36 without having to stoop, as seen in figs. 3A and 3B above. It should be noted that in addition to being pulled as shown, the bucket 10 may be pushed similar to a wheelbarrow. Figure 4 below shows the bucket 10 during use, wherein a user utilises apertures 28, 30 to at least partially invert the bucket

Fig. 4

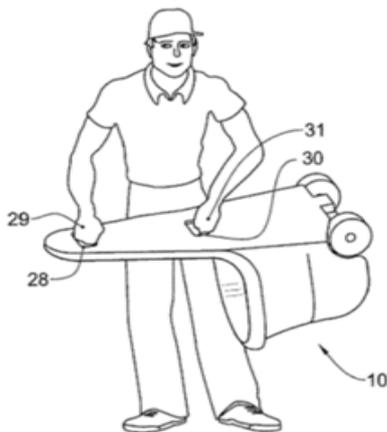
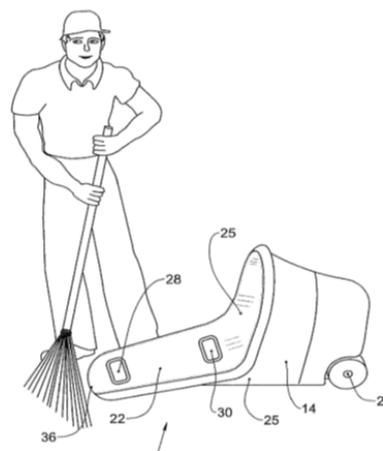


Fig. 6



- 9 The bucket 10 is adapted to pivot about the wheels 24 between a first position, as seen in fig. 1, wherein the upwardly extending portion 22 is disposed substantially vertically, and a second position, as seen in fig. 6, wherein the upwardly extending portion 22 is disposed substantially horizontally. According to one particular design, the top edge 36 of the upwardly extending portion 22 is preferably designed so that at least a substantial portion lies flat against the ground when the bucket 10 is in the second position. In addition, the upwardly extending portion 22 may be substantially flat to allow it to lie flush with the ground. The wheels 24 are designed to serve as support points adapted to provide further stability to the bucket 10 in the second position. When in the second position, the upwardly extending portion 22 constitutes a ramp via which the user may easily sweep or rake debris into the bucket 10, as seen in fig. 6.

- 10 The granted patent contains a single independent claim, claim 1, followed by 18 dependent claims which will only be considered if claim 1 is found to lack novelty or lack an inventive step.

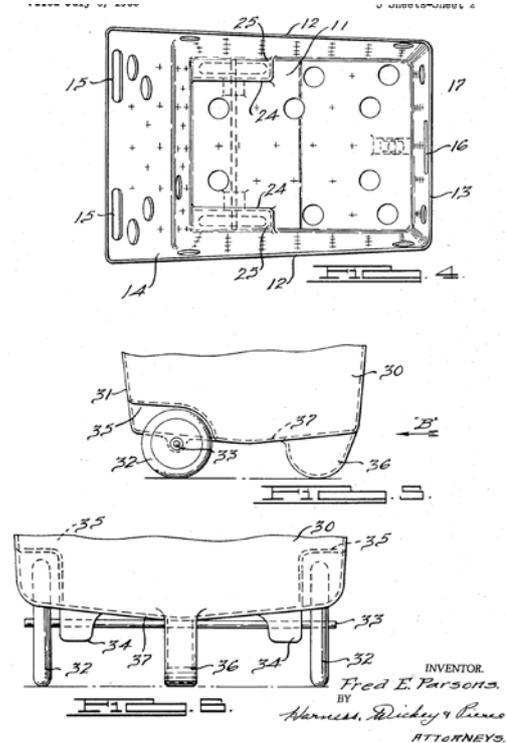
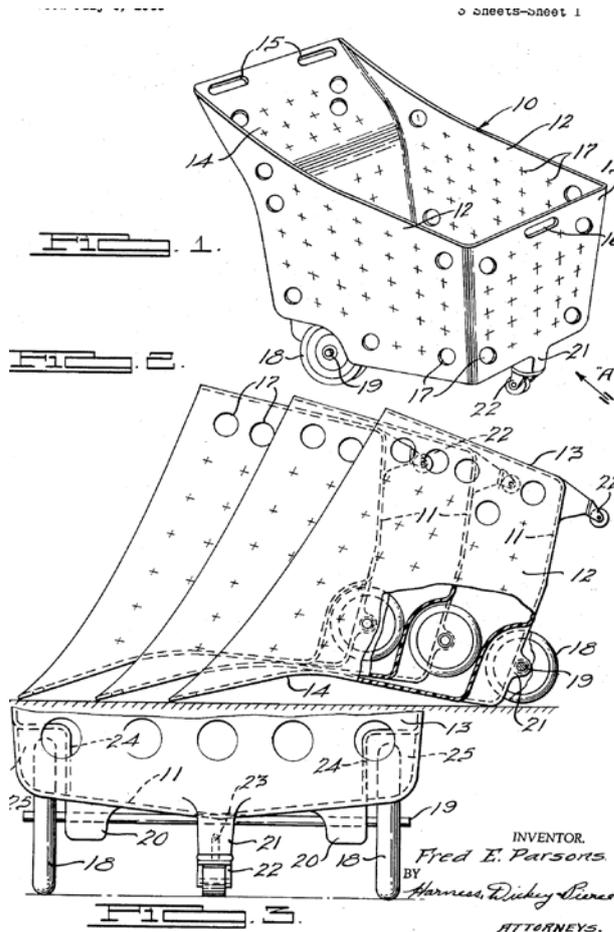
A bucket (10,61) comprising:

- (a) generally vertical sidewalls (14) and a bottom portion (12), defining together a bucket interior (16);
- (b) a back face (20), constituting one of said sidewalls (14), extending substantially above the height of the bucket interior (16); and

characterized in that said bucket (10,61) is adapted for nested stacking and the bucket (10,61) comprises at least two wheels (24) mounted to the bucket (10,61) at the back face (20) about an axis at a bottom area thereof.

The evidence

- 11 The witness statements admitted to the proceedings were not challenged as none of the witnesses were called for cross-examination. The two additional patent documents filed with the claimant's evidence statement (US3329321 and US2001/0045371) were only referred to briefly.
- 12 The decisions from other jurisdictions and Tribunals filed as evidence by both the claimant and the defendant were not discussed in detail. At the hearing it was confirmed that I am required to come to my own conclusion on the basis of the evidence and arguments put to me.
- 13 US5758886, a slant topped bucket without wheels, was not submitted as evidence but was referred to as prior art in the patent in suit and was briefly referred to in arguments put forward by Dolleymores.
- 14 The disclosure and claims of US'271 were discussed in detail. Figures 1-6 of US'271 are shown below.



- 15 US'271 discloses a wheeled cart having sloped walls so that the body and wheels of one cart nests within the body of a similar cart to a degree that the wheels of the first cart engage the bottom of the body of the second cart. The cart may be made by moulding from a suitable plastic material.
- 16 The cart is described as being useful "to carry the groceries and other produce from the supermarket to the customer's automobile so that the more expensive steel carts now in use in the store may be left in the store" and also useful "in yards and gardens in transporting cut grass, leaves, plants, soil and the like from one place to another".

The law

- 17 The comptroller's powers to revoke a patent on the application of another person are set out in section 72(1) of the Act, the relevant provisions of which read as follows:

72(1) Subject to the following provisions of the Act, the court or the comptroller may by order revoke a patent for an invention on the application of any person ... on (but only on) any of the following grounds, that is to say -

- (a) the invention is not a patentable invention;*
- (b) ...*
- (c) ...*

(d) the matter disclosed in the specification of the patent extends beyond that disclosed in the application for the patent, as filed, or, if the patent was granted on a new application filed under section 8(3), 12 or 37(4) above or as mentioned in section 15(9) above, in the earlier application, as filed;

(e) ...

- 18 An invention is patentable if it meets the conditions set out in section 1(1) of the Act, namely that the invention is new, it involves an inventive step, it is capable of industrial application and is not excluded.
- 19 Sections 2 and 3 of the Act define what is meant by “new” and “inventive step” respectively. Section 2 states that an invention shall be taken to be new if it does not form part of the state of the art, and goes on to define the state of the art as comprising anything made available to the public before the priority date of the invention. Section 3 states that an invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art.
- 20 Also relevant is section 125 of the Act, which specifies that an invention shall be taken to be defined by the claims as interpreted by the description and any drawings in the patent specification. Section 125(3) says that the extent of protection conferred by a patent or application for a patent shall also be determined in accordance with the Protocol on the Interpretation of Article 69 of the European Patent Convention, which reads as follows:

Article 69 should not be interpreted as meaning that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims. Nor should it be taken to mean that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patent proprietor with a reasonable degree of legal certainty for third parties.

- 21 The following grounds for revocation were pursued by Dolleymores at the hearing:
- a) lack of novelty, specifically that the invention as defined by claim 1 of the patent is anticipated by US'271;
- b) lack of inventive step, specifically that the invention as defined by claim 1 of the patent is obvious in the light of US'271.

Novelty

- 22 The current test for novelty was set out by Lord Hoffman (sitting in the Court of Appeal) in *H Lundbeck A/S v Generics (UK) Ltd*¹:

¹ [2008] RPC 19, para 19

“In order to anticipate a patent, the prior art must disclose the claimed invention and (together with common general knowledge) enable the ordinary skilled person to perform it.”

- 23 In order to disclose the claimed invention the prior art must disclose a clear description of, or clear instructions to make, something that would necessarily infringe the patent if carried out after the grant of the patent (*Synthon BV v SmithKline Beecham plc*²). Secondly, that the description in the prior art is sufficiently clear and complete for it to be performed by a person skilled in the art without undue effort.
- 24 In order to decide whether claim 1 is novel, it is first necessary to determine its scope and meaning. The established authority on claim construction is found in *Kirin-Amgen*³, where Lord Hoffman held that:

“When applying a ‘purposive construction’, the question is always what the person skilled in the art would have understood the patentee to be using the language of the claim to mean” and “The Catnic principle of construction is therefore in my opinion precisely in accordance with the Protocol. It is intended to give the patentee the full extent, but not more than the full extent, of the monopoly which a reasonable person skilled in the art, reading the claims in context, would think he was intending to claim”.

I shall begin by identifying the skilled person and the common general knowledge of that person.

The skilled person

- 25 According to the relevant authorities, a patent specification is addressed to those likely to have a practical interest in the subject matter of the invention, and such persons are those with practical knowledge and experience of the kind of work in which the invention is intended to be used. The addressee comes to a reading of the specification with the common general knowledge of persons skilled in the relevant art, and he or she reads it knowing that its purpose is to describe and demarcate an invention. The skilled person is unimaginative and has no inventive capacity. In some cases the patent may be addressed to a team of persons with different knowledge and experience.
- 26 Dolleymores argue that the skilled person is an individual working within the field of simple engineering for the purpose of producing common-or-garden articles such as wheelbarrows.
- 27 Keter argue that the skilled person would be a trained engineer in the moulded household containers industry, who would have extensive knowledge of said industry.
- 28 It should be noted that the specification provides no general teaching regarding plastics moulding or manufacture which would be required to be able to perform the invention. The skilled person would therefore require knowledge of plastics moulding in order to perform the invention. Claim 1 is to a bucket and so it is likely that the

² [2006] RPC 10 at [22] and [21]

³ *Kirin-Amgen v Hoechst Marion Roussel Ltd* [2005] RPC 91 at [32] and [48]

skilled person would be a plastics moulding engineer with experience in manufacturing small to medium containers.

The common general knowledge of the skilled person

- 29 The law as to what constitutes common general knowledge is set out by the Court of Appeal in *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd*⁴ and *Beloit Technologies Inc v Valmet Paper Machinery Inc*⁵. In order to constitute common general knowledge, it is not enough that information is generally known to the relevant skilled persons: it must also be, in the words of the Court of Appeal in *General Tire*, “generally regarded as a good basis for further action”. Laddie J put the same idea in slightly different words in *Raychem Corp’s Patents*⁶ when he said that the common general knowledge “includes all material in the field that the skilled person is working and which he knows exists, which he would refer to as a matter of course if he cannot remember it and which he understands is generally regarded as sufficiently reliable to use as a foundation for further work or to help understand the pleaded prior art”.
- 30 Dolleymores did not put forward any arguments as to the common general knowledge of the skilled person, saying that “one could scarcely conceive of a less complex or technically demanding area of technology...the patent demands very little of the skilled person”. Images of examples of buckets were also submitted in the evidence rounds alongside general statements that the buckets were well known and widely available.
- 31 Keter argued that the claimant failed to set out what the common general knowledge would be and that the examples of buckets provided by Dolleymores do not constitute the common general knowledge, quoting the decision in *British Acoustic Films v Nettlefold Productions*⁷ that “it is not sufficient to prove common general knowledge that a particular disclosure is made in an article, or series of articles, in a scientific journal, no matter how wide the circulation of that journal may be, in the absence of any evidence that the disclosure is accepted generally by those who are engaged in the art to which the disclosure relates.” Keter submitted that that the common general knowledge is normally established by expert evidence and noted that there has been no such expert evidence in this case.

Claim construction

- 32 A summary of the law in relation to claim construction can be found in *Virgin Atlantic Airways Ltd v Premium Aircraft Interiors UK Ltd*⁸, which emphasises that claims are not construed alone or in the abstract but within their context in the specification of the patent, that purposive construction is vital, and that one is in the end concerned with the meaning of the language used. Meticulous verbal analysis is to be eschewed.
- 33 In *Schenck Rotec GmbH v Universal Balancing Limited*⁹ it was held that “construction is concerned with what a reasonable person would understand the author to be using the words to mean....I remind myself that claims are not construed

⁴ [1972] RPC 457, page 482&483

⁵ [1997] RPC 489, pages 494-495

⁶ [1998] RPC 31, page 40

⁷ [1936] 53 RPC 221 Luxmoore J stated at [250].

⁸ [2010] RPC 127 930: 192-221

⁹ [2012] EWHC 1920 at [72]

alone or in the abstract but in their context in the specification; that purposive construction is vital (there may be several purposes and several embodiments) and that one in the end is concerned with the meaning of the language used.”

34 Claim 1 can be broken down into integers as follows:

[a] A bucket, comprising

[b] generally vertical side walls and

[c] a bottom portion

[d] defining together a bucket interior,

[e] a back face

[f] constituting one of said side walls

[g] extending substantially above the height of the bucket interior, and characterised in that

[h] said bucket is adapted for nested stacking

[i] and the bucket comprises at least two wheels

[j] mounted to the bucket at the back face

[k] about an axis at the bottom area thereof.

35 Dolleymores provided arguments in relation to the construction of the preamble of claim 1 and of integers [a], [b], [e], [f], [g], [h], [i], [j] and [k]. Keter provided arguments in relation to the construction of [a], [b], [g], [h] and [j]. I have summarised the arguments and construed each of the claim integers in turn below, taking care to construe each integer in the context of the claim as a whole.

Preamble

36 Dolleymores argued that the statement “US5758886 discloses a bucket according to the preamble of claim 1” at paragraph [0006] of EP1690772 meant that the slope topped bucket of US5758886 satisfied the requirements of integers [a] - [g]. Keter made the point that it is dangerous to use a different document to construe what is actually being disclosed or taught by the patent. The interpretation of the claims of the patent should be carried out using the disclosure and teachings of the patent document.

37 I agree that the claim should be construed using the disclosure and teachings of the patent; the question that needs to be answered is what would the skilled person have understood the patentee to have meant by the claim integers and so the disclosure of US5758886 was not considered.

[a] A bucket:

38 Dolleymores submitted four points in relation to the term bucket:

- (i) “bucket” cannot be interpreted as denoting a pail or something close to a pail, such as the familiar round gardener’s or builder’s bucket with a single hooped swinging carrying handle;
- (ii) the patent makes clear at paragraph [0031] that “the shape of the bucket is not limited to the ones illustrated in the figures...other shapes of the bucket such as square or hexagon are possible”;
- (iii) the size of the bucket is not expressly limited in size to something like a pail, i.e. at paragraph [0031] “the bucket may be provided in different sizes for different applications” and the provision of an aperture 68 and stopper 70 in the figure 17 embodiment would imply that the bucket was too large to tip out liquid contents;
- (iv) the term bucket has several meanings, only one of which is “pail”. The Oxford Dictionary of English was used to evidence other uses of the term bucket, such as “a compartment on the outer edge of a waterwheel; the scoop of a dredge or grain elevator; a scoop attached to the front of a loader, digger or tractor...”

39 Keter responded that the term bucket is not ambiguous in the context of the patent, especially when interpreted using the description and drawings. The bucket is used for the light-to-medium duty transport of items (paragraph [0002]) and it is necessary that the bucket can hold liquids and solids (see paragraph [0013]) and can be lifted and at least partially inverted by a person when filled (see paragraph [0020] and fig.5). Although the size of the bucket is not expressly limited by the patent, the fact that the upwardly extending portion has to be extended substantially to allow the user to push or pull it without stooping goes to show that the bucket is going to be of relatively small size (see paragraph [0019]). The embodiment depicted in figure 17 is described as “useful for drainage of liquid from the bucket in a controlled manner” in paragraph [0029] and so has no bearing on the size of the bucket.

40 Additionally the defendant argued that there is no basis in the patent for construing the bucket as any large open container which is suitable for scooping, such as the distinct buckets of the dictionary definition which are attached to waterwheels or tractors or the like. The limits on the size of the bucket are plain from the description and drawings of the patent.

41 What would the person skilled in the art have determined the patentee to mean by the term “bucket”? It seems highly unlikely that the scoop of a digger or a waterwheel would be considered when the term is interpreted by the skilled person in the light of the description. Even though there is no expressed limitation to the size of the bucket in the patent, the absence of an explicit limitation does not mean that there is no limit on the sizes contemplated. The bucket is described and depicted as being useful for the small-to-medium duty transport of items and able to be manually lifted when filled; this implicit limitation on the size of the bucket must be borne in mind.

[b] Generally vertical sidewalls

42 Dolleymores stated that the bucket is required to be adapted for nested stacking and as any container adapted for nested stacking cannot have vertical sidewalls, the term “generally vertical” should be understood as meaning “not vertical”. Dolleymores expanded on this to state that there is no express limitation as to the degree of

outward slant envisaged by the patentee, however a bucket with a pronounced slant to the sidewalls would become more difficult to manoeuvre and less stable, and so a bucket with slanted walls at 45° would presumably not have been within the contemplation of the patentee.

- 43 Keter contended that “generally vertical” meant essentially vertical, except for small deviations and so claim 1 should be construed as meaning that four walls, including the back face, are essentially perpendicular to a horizontal plane. Keter explained that this construction is consistent with the description of the invention, which teaches that the upwardly extending portion is such that at least a substantial portion lies flat against the ground when it is lying down (see paragraph [0010] of the patent) and may be substantially flat to allow it to be flush with the ground (see paragraph [0023] of the patent) and noted that figures 4 and 7-11 show that the bucket has an almost vertical back face.
- 44 I consider that the skilled person would know that a bucket with sidewalls having a pronounced outward slant would be unstable and also that a bucket adapted for nested stacking could not have perfectly vertical sidewalls. I conclude that the skilled person would interpret the term broadly so that “generally vertical” would include more than only minor deviations from vertical. I do however agree with the claimant that 45° is too much of a slant to be practical and so this extensive deviation from vertical would not have been within the contemplation of the patentee. All of the embodiments described and depicted in the patent have a flat or near flat back face which is described as necessary for functional uses of the bucket, and so the skilled person would assume that a substantially vertical and substantially straight back face was required.

[e] A back face [f] constituting one of said side walls [g] extending substantially above the height of the bucket interior

- 45 Dolleymores asserted that the term “substantially” in a patent claim may render the claim void for lack of clarity in the examination stages of a patent application, citing a European Patent Office decision T-0971/10¹⁰. It was noted that there is no express direction in the patent specification of any amount or ratio that the back wall must extend above the height of the bucket interior, instead only the preferably feature (at paragraph [0019]) that “the upwardly extending portion is preferably of such a height so to allow a user to grasp the first aperture or the rim at the top edge without having to stoop, as seen in figures 3A and 3B.”
- 46 Dolleymores stated that the claim language required the sidewalls to be vertical but noted that there is no such requirement for the upwardly extended portion of the back face, insisting that some of the patent diagrams showed a back face with a pronounced backward tilt.
- 47 Dolleymores further argued that as the extended back face is used for the sliding transfer of articles from the ground to the bucket via the back wall when the bucket is lying down (see figure 6 and paragraph [0011] of the patent), then if the extended back face is construed to satisfy this purpose, then there is no need for the back face to be greatly extended; a small ramp or even no ramp at all would be sufficient.

¹⁰ ECLI:EP:BA:2011:T097110.20110825

48 Keter reasoned that the term “extending substantially”, meant that it should be extended greatly or significantly above the height of the sidewalls of the bucket, using the definition of substantially from the Shorter Oxford English Dictionary and noting that all of the figures show that the back face of the bucket is almost twice the height of the sidewalls of the bucket. Keter said that the patent teaches three reasons for this substantial extension:

- (i) a bucket that can be easily manoeuvred having a handle at a user height (see paragraph [0019]),
- (ii) the upwardly extending portion provides a ramp whereby the user can sweep debris into the bucket (see paragraph [0023]) and,
- (iii) the upwardly extending portion can be used to direct the flow of a liquid when it needs to be discarded (see paragraph [0013] and figure 6).

49 Keter responded that the pre-grant requirements at the EPO for the claims to be clear, concise and supported by the description, as in T-0971/10 referred to by the claimant, is not useful when construing a granted claim. The facts of this EPO decision related to whether “substantially circular” and “substantially along the radius” were clear in a particular claim. In this patent, the term substantial extension is clear and it means a great extension above the bucket interior.

50 Keter maintained that the back face constitutes one of the sidewalls, and so is required to be generally vertical as the sidewalls are required to be. There is no disclosure in the patent of the back face being tilted and although some perspective drawings used may look as though a slight backward tilt may be present, the description of the bucket and figures 4, 8, 9, 10 and 11 show that the back face is straight, flat and generally vertical.

51 So what would the person skilled in the art have determined the patentee to mean by the term “extending substantially”? Even though there is no express requirement for the amount or ratio that the back wall must extend above the height of the bucket interior in the patent description, the skilled person would know that the absence of an explicit requirement does not mean that there is not a requirement for a substantial extension. The upwardly extending portion is described as being of such a height to allow the user to grasp the first aperture or rim at the top edge without having to stoop (paragraph [0019]). When interpreting this height requirement of the back face in the context of the teaching of the patent to a bucket which is able to be lifted and carried when filled (paragraph [0020]), the skilled person would understand that the extension of the back face would be significant and substantially vertical.

[h] Adapted for nested stacking

52 Dolleymores stated that the requirement for nested stacking meant that the sidewalls must be slanted outwards so that one item may nest inside the other.

53 Keter argued a narrower meaning, using the definition of “stack” from the Shorter Oxford English Dictionary that the buckets can be nested in a *vertical* stack or *vertical* pile and stated that this interpretation is consistent with figure 2 of the patent.

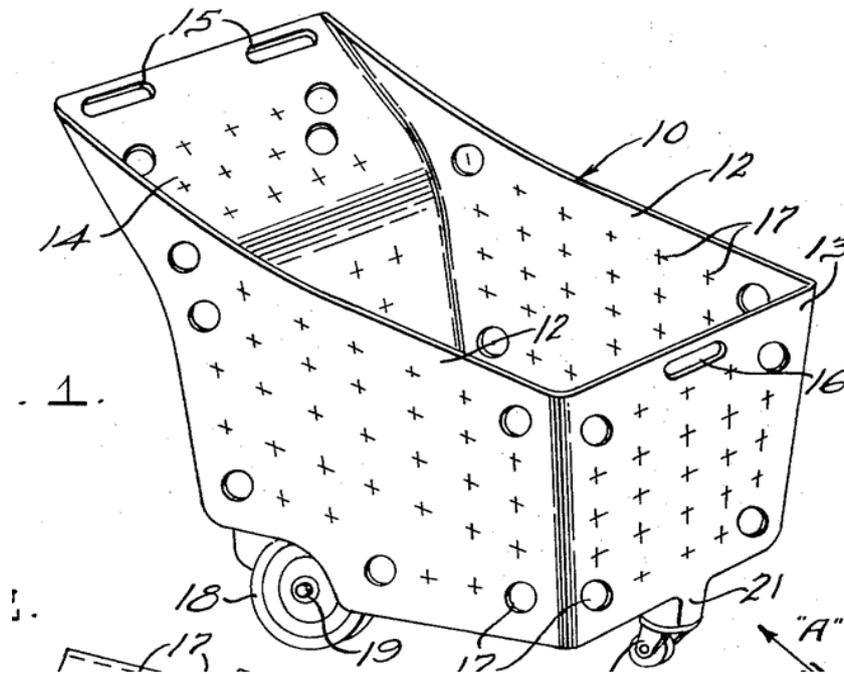
54 Even though the patent only describes the vertical nesting of wheeled buckets, the specific embodiments of buckets disclosed in the patent appear to be capable of

vertical or horizontal nesting. I consider that the skilled person would presume that the vast majority of buckets which can be nested vertically can also be nested horizontally.

[i] The bucket comprises at least two wheels [j] mounted to the bucket at the back face [k] about an axis at the bottom area thereof

- 55 Dolleymores contended that the requirement that the bucket's two wheels are at the back face is made clear by the diagrams of the patent, bearing in mind that the wheels must be positioned in such a way that they do not prevent one bucket from nesting inside another.
- 56 Keter reasoned that the meaning of "at the back face" is unambiguous and notes that the wheels are positioned at the back face to enable the user to pivot the bucket from the first (vertical) to the second (horizontal) position easily and the wheels are not meant to extend beyond the back face except as necessary to allow the bucket to be pivoted and rolled (see paragraph [0016] of the patent).
- 57 The skilled person would understand that claim 1 is not restricted to the specific embodiments depicted which require that the wheels are positioned at the back face to enable the user to pivot the bucket from the first to the second position easily. The skilled person would understand that the wheels are positioned so that the bucket can be pulled easily, so that the buckets can nest and that the wheels are mounted toward the back face of the bucket.
- 58 Having construed the scope and meaning of claim 1 of the patent, I will now consider the issue of novelty in the light of the prior art document.

The prior art US3346271



- 59 The cart of US'271 comprises a one-piece body 10 moulded from a suitable plastic. The body 10 comprises a bottom 11, a pair of spaced upright side portions 12, a front end portion 13 and a rear end portion 14. The rear end portion 14 is curved upwardly and rearwardly. The upper edge of the rear end portion 14 is provided with a pair of hand holes 15 by which the cart may be grasped by the operator. The rear curvature of the rear end portion 14 positions the hand openings 15 a sufficient distance rearwardly of the device, so that the operator's feet will not engage the cart as it is being moved. The front end portion 13 is provided with a handhole 16 so that by grasping the hand holes 15 and 16, it is stated that the device may be lifted for emptying. If a more lightweight cart is required, the side walls 12 and the end walls 13 and 14 and, if desired, the bottom 11 may be provided with a plurality of apertures 17. The cart is provided adjacent its rear wall 14 with a pair of wheels 18 which rotate on an axle 19 mounted and secured in bosses 20 formed on the bottom 11 when the device is moulded. A caster wheel 22 may also be provided. This caster turns in the direction the operator turns the cart and therefore assists in guiding the cart and improving its manoeuvrability. There may be a boss 36 instead of a caster wheel; the boss skids along the ground when the cart is moved. The side walls 12 and the end walls 13 and 14 taper outwardly from the bottom 11 so that when being stored, the carts may be stacked by telescoping one within the other. In the figures 5 and 6 embodiment the body 30 is provided adjacent its rear wall 31 with a pair of wheels 32. These wheels are mounted on an axle 33 which is supported on bosses 34 cast with the bottom of the cart.
- 60 The claimant contends that the patent lacks novelty over US'271 because all of the features of claim 1 are present in the cart disclosed in US'271.
- 61 In order to show that claim 1 lacks novelty, Dolleymores initially presented an argument relating to the breadth of the claims of US'271, especially the breadth and disclosure of claim 8. However, the disclosure of US'271 is found in the description of the embodiments and in any further specific information provided in the claims, not all possible embodiments within the breadth of the claims of the prior art are disclosed in that prior art. Construing the claims of the prior art to show that they encompass the patent invention does not evidence a lack of novelty, only a *clear and unambiguous disclosure of the invention in the prior art*¹¹ can do that. Subsequent arguments from the claimant were more helpful as they relied upon whether the construed integers of claim 1 of the patent are disclosed in the embodiments of US'271.
- 62 Dolleymores explained how US'271 describes a cart with overlapping uses to the bucket described in the patent and the overlapping uses were said to be evidence of the fact that the containers were of similar size. Additionally, it is stated at column 2, line 24-26 of US'271 that "The front end portion is provided with a handhole so that by grasping the handholes 15 and 16, the device may be lifted for emptying", explicitly teaching that the cart is not so large as to be unable to be manually lifted when filled.
- 63 Dolleymores noted that the fact that the cart is not called a bucket does not mean that it cannot be considered to be a bucket; following Sachs LJ in *General Tire & Rubber Co v Firestone Tire & Rubber Co*¹²:

¹¹*Dr Reddy's Laboratories (UK) Ltd v Eli Lilly and Co Ltd* [2008] EWHC 2345 (Pat) at [136] and [137]

¹² *General Tire & Rubber Co v Firestone Tire & Rubber Co*, [1972] RPC 457 at 485

“The prior inventor, however, and the patentee may have approached the same device from different starting points and may, for this reason, or it may be for other reasons, have so described their devices that it cannot be immediately discerned from a reading of the language which they have respectively used that they have discovered in truth the same device; but if carrying out the directions contained in the prior inventor’s publication will inevitably result in something being made or done which, if the patentee’s patent were valid, would constitute an infringement of the patentee’s claim, this circumstance demonstrates that the patentee’s claim has in fact been anticipated”.

- 64 Keter responded that the cart of US’271 is not a bucket as it is too large and bulky to be considered to be a bucket, specifically noting that there are two handholes at the rear of the cart because the user requires both hands to push and steer the cart. The presence of a third wheel which is required to assist with the manoeuvrability of the cart (column 2, lines 40-46) is also argued to show that the cart is bulky and heavy.
- 65 Keter contended that the cart of US’271 cannot be a bucket as it cannot carry liquids due to the presence of apertures, further noting that there is no disclosure of the cart carrying any liquid. They said that the possible need for apertures to reduce the weight of the cart further strengthens the argument that the cart is large and bulky. Additionally, Keter argued that the cart of US’271 cannot be a bucket because there is no disclosure of carrying the cart when filled - there are three handholes required for the user(s) to lift the cart (column 2 lines 23-26) and even then it is not clear how the cart would be lifted, seeming more likely to be tipped.
- 66 Keter insisted that this case resembles the situation in *Hickman v Andrews*¹³ where it was alleged that a claim to a workbench was anticipated by a bookbinders press. In this case the Court of Appeal found that the press had all the features which had been used to characterise the claimed workbench, which would therefore be anticipated if, as had been argued, the press could serve as a workbench, but then concluding that the alleged anticipating press was not a workbench. *“It is in our view far too small to be regarded as such, but on the contrary it is a vice to be used on a workbench”* (page 187). Having determined the proper meaning of the word “workbench”, the Court of Appeal upheld Graham J’s finding that the Russell Press was not a ‘workbench’, as it was ‘far too small to be so’. On the same point, Graham J held that:

“ ..if a practical man saw Russell lying on the floor of a book-binding establishment or of a carpenter’s shop, he would never call it a workbench. The object of the Russell laying press is to carry out book-binding operations, though it could no doubt be used if one was minded to do so, for some light carpentry operations. The fact that there is an overlap between the uses does not make one an anticipation of the other. Any article can be used for a purpose for which it was not intended. [Russell] does not satisfy the test of being a “workbench” in the context of the specification, and the corollary of this is that the patentees could not by their claim prevent anyone who wanted to do so, mounting Russell on a stand and using it for any purpose, including carpentry.”

¹³ *Hickman v Andrews* [1983] RPC 147, pg 168

- 67 Keter followed this reasoning by concluding that the prior art does not relate to a bucket (it is a cart which is too big and too different to be considered to be a bucket), noting especially that the presence of an overlap between the stated uses of the cart and bucket does not make the cart an anticipation of the bucket.
- 68 After full consideration of the above arguments and case law, I find that the disclosed cart of US'271 is indeed large and bulky; it moves while supported on three support points (two wheel and a castor or two wheels and a skid) and requires both hands of the user to steer and manoeuvre it. The brief disclosure of lifting the cart is unclear and there is no disclosure of the cart being carried, as a bucket would be required to be. Therefore the cart is too big and bulky to be considered to be "a bucket" as has been construed above, and so claim 1 is not anticipated by the disclosure of US'271.
- 69 Having found that the cart is too big and bulky to anticipate the bucket of claim 1 of the patent I do not need to consider the other claim integers of claim 1. Claim 1 is novel over US'271.

Inventive step

- 70 The Court of Appeal in *Windsurfing*¹⁴ formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli*¹⁵. Here, Jacob LJ reformulated the *Windsurfing* approach as follows:
- (1)(a) Identify the notional "person skilled in the art".
 - (1)(b) Identify the common general knowledge of that person.
 - (2) Identify the inventive concept of the claim in question or if that cannot be readily done, construe it.
 - (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or claim as construed.
 - (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention?

- 71 The identity of the skilled person and the difficulties in establishing their common general knowledge has been discussed in paragraphs 25-31. There was little discussion on the inventive concept of the patent and so it was decided to proceed with the previously construed claim 1.

- 72 Both sides have referred to a number of authorities I should bear in mind in relation to obviousness. I shall summarise the salient points very briefly.

- 73 In *Pozzoli* at [19], Jacob LJ stated:

"In some cases the parties cannot agree on what the concept is. If one is not careful such a disagreement can develop into an unnecessary satellite debate. In the end what matters is/are the difference(s) between what is claimed and the prior art. It is those differences which form the 'step' to be considered at stage (4). So if a disagreement about the inventive concept of a

¹⁴ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*, [1985] RPC 49

¹⁵ *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

claim starts getting too involved, the sensible way to proceed is to forget it and to simply work on the features of the claim”

- 74 The benefit of such an approach was noted by Lord Hoffman in *Conor v Angiotech*¹⁶:

“The invention is the product specified in the claim and the patentee is entitled to have the question of obviousness determined by reference to his claim and not to some vague paraphrase based upon the extent of his disclosure in the description”.

- 75 Whether the skilled person would or would not have made a modification to the prior art is not relevant if the step between the prior art and the claim involves no technical contribution to the art, as Kitchen LJ (as he then was) explained in *Abbott Laboratories Ltd v Evysio Medical Devices ULC*¹⁷:

“There is no invention in stipulating a feature which is arbitrary and serves no useful purpose. It has long been established that a patent cannot be used to prevent a person from doing what is merely an obvious extension of what has been done or what was known in the art before the priority date. The public are entitled to make obvious products using obvious and ordinary techniques. The selection of a number of these products by reference to an arbitrary parameter which has no technical significance does not involve an inventive step and does not create a patentable invention. It involves no technical ingenuity and solves no technical problem.”

- 76 From the Court of Appeal in *Generics v Daiichi*¹⁸: “There is fundamentally only one test for lack of inventive step: was the invention obvious to a person skilled in the art having regard to any matter which forms part of the state of the art?”

- 77 It is crucial to avoid hindsight, as stated in *British Westinghouse v Braulik*¹⁹

“I confess that I view with suspicion arguments to the effect that a new combination, bringing with it new and important consequence in the shape of practical machines, is not an invention, because, when it has once been established, it is easy to show how it might be arrived at by starting from something known, and taking a series of apparently easy steps. This ex post facto analysis of invention is unfair to the inventors, and in my opinion it is not countenanced by English Patent Law”;

and also in *Technograph Printed Circuits v Mills & Rockley (Electronics)*²⁰:

“But the question is not whether it is now obvious to the court (or to the jury) but whether at the relevant date it would have been obvious to the unimaginative skilled technician.”

- 78 Additionally, consideration is to be given to the question “why was it not done before?” as in *Technip France SA’s Patent*²¹

¹⁶ [2008] RPC 125 (9): 716-732 at [19]

¹⁷ [2008] RPC 125 (7): 521-590, at [181]

¹⁸ [2009] RPC 23: 828-857 at [17]

¹⁹ [1910] 27 RPC 209 at 230

²⁰ [1972] RPC 346 at 362

²¹ [2004] RPC 46 at [122]

“All the “bits and pieces” of the invention were known separately for many years. The question “why was it not done before” is always a powerful consideration when considering obviousness, particularly when all the components of a combination have been long and widely known.

In *Napp v Ratiopharm*²² the obviousness attack failed because there was an absence of any prior motivation.

- 79 Dolleymores submitted that the differences between US'271 (the state of the art) and the construed claim is only the smaller cart body and the extended back face, and argued that it would be obvious to make the body of the cart of US'271 smaller to improve the manoeuvrability of the cart, while maintaining the height of the extended back face so that it remains at a comfortable height for the user to grasp, concluding that this would result in a modified cart which would fall within the scope of claim 1. Dolleymores further argued that any changes to the angles of the sidewalls or back face would be arbitrary and there is nothing to suggest that the skilled person would not choose to make the sidewalls or back face somewhat steeper.
- 80 Dolleymores asserted that the combination of a smaller cart, with slightly steeper sidewalls and slightly extended or differently angled back simply produces no technical benefit over a cart of US'271.
- 81 Keter identified that there had been no expert evidence provided to assist the Tribunal in determining what the common general knowledge was or to assist with whether the steps required to get from the cart to the bucket would be obvious. Secondly, that here had been no explanation of any motivation to modify the cart of US'271 to try to get to the bucket of the patent. Thirdly, Keter argued that the claimant is relying on the benefit of hindsight by alleging that any feature of the claimed bucket perceived to be undisclosed in US'271 cannot amount to anything other than a workshop modification; and fourthly that it is highly relevant that no-one had attempted to make such modifications in the light of the common general knowledge at the priority date of the patent.
- 82 I have previously found that the cart of US'271 is too large and bulky to anticipate claim 1 of the patent. If the cart kept the same general proportions but was to be made smaller, then the cart may no longer be too large and bulky in comparison with the bucket, but the handholes 15 provided in the back face of the smaller cart of the design of the cart in US'271 would be too low for the user to grasp comfortably.
- 83 The claimant has argued that it would be obvious to extend the back face of the smaller cart so that the handholes 15 remain at a useable height. The back face of the cart of US'271 “is curved upwardly and rearwardly to give the device a more graceful appearance” (column 2, lines 15-16) and it is also stated that the “rear curvature of the rear end portion 14 positions the hand openings 15 a sufficient distance rearwardly of the device so that the operator’s feet will not engage the cart when it is being moved” (column 2, lines 23-26). Therefore, an extension of the disclosed back face of the cart of US'271 would have to extend rearwardly as well as upwardly.
- 84 Notwithstanding the lack of evidence or argument towards the motivation of the skilled person to make these changes or the obviousness of these changes to the

²² [2009] RPC 18 at [H21]

skilled person without any knowledge of the patented invention, the modified cart discussed above does not appear to fall within the scope of claim 1. The back face of the modified cart is not substantially vertical as it is extended “upwardly and rearwardly” (the back face having been construed to be required to be substantially vertical and substantially straight).

- 85 Additionally, it cannot be said that the changes are arbitrary and serve no useful purpose; the modified cart would appear to be more easily manoeuvred than the large and bulky cart of US'271 and so a technical benefit of increased manoeuvrability is realised by the modifications.
- 86 Finally, two of the purposes of the substantial extension of the back face taught in the patent would not be satisfied by the “upwardly and rearwardly” extended back face of the modified cart: the substantial extension would not provide a ramp whereby the user can sweep debris into the bucket (see paragraph [0023]) and the upwardly extending portion could not be used to direct the flow of a liquid when it needs to be discarded (paragraph [0013] and figure 6).
- 87 I find that it has not been shown that the differences between US'271 and the claimed invention would constitute obvious steps to the person skilled in the art. Claim 1 is inventive over US'271. I am not required to consider the dependant claims.

Summary

- 88 The claimant has not succeeded on any of the grounds for revocation pleaded in its statement of case, and therefore the application for revocation fails. The patent remains in force.

Costs

- 89 Keter have successfully defended their patent in these proceedings and are therefore entitled to an award of costs in their favour. Keter argue that in deciding the quantum of award I should take into account the time wasted by the claimant's filing of the witness statement as evidence in reply. They also suggest that the claimant's application for revocation was an abuse of process given the findings in respect of equivalent applications abroad. On this latter point, I agree with the claimant that it was perfectly entitled to make the application under section 72 even when the validity of foreign equivalents had been successfully defended. I note also the claimant's observation in relation to the straightforward nature of these proceedings and the requirement for unreasonable behaviour to be demonstrated in awarding off-scale costs. Also, when the issue of the witness statement was raised, it was quickly withdrawn and replaced by a further statement which took up little time to resolve at the hearing.
- 90 Taking all of the arguments on costs into account, I find no reason to depart from the standard published scale of costs set out at Annex A of Tribunal Practice Notice 2/2016²³. I determine the amount of the award in favour of Keter as follows:

²³ <https://www.gov.uk/government/publications/tribunal-practice-notice-22016/tribunal-practice-notice-22016-costs-in-proceedings-before-the-comptroller>

Preparing a statement and considering the other side's statement	£ 300
Preparing evidence and considering/commenting on the other side's evidence	£ 600
Preparing for and attending a hearing	£1500
Total	£2400

I hereby order Saunders and Dolleymore LLP to pay Keter Plastics Ltd the sum of £2400 as a contribution towards their costs in these proceedings, this sum to be paid within seven days of the expiry of the appeal period specified below.

Appeal

- 91 Any appeal must be lodged within 28 days after the date of this decision.

H Jones

Deputy Director, acting for the Comptroller