Opinion Number

OPINION UNDER SECTION 74A

Patent	GB 2549812 B
Proprietor(s)	Ionic Systems Limited
Exclusive Licensee	
Requester	J. E. Evans-Jackson & Co. Limited
Observer(s)	
Date Opinion issued	23 December 2020

The Request

- 1. The comptroller has been requested by J. E. Evans-Jackson & Co Limited ("the Requester") to issue an opinion as to whether GB 2549812 B ("the Patent") is invalid with regard to added matter, lack of novelty, or lack of inventive step in view of evidence and arguments presented by the Requester.
- 2. The Patent entitled "Window cleaning pole" was filed on 19 September 2016, was granted on 18 April 2018 and remains in force.
- 3. The request was received on 7 October 2020. It was accompanied by a statement explaining the request along with 21 pieces of evidence A1-A21.
- 4. There were no observations or observations in reply.

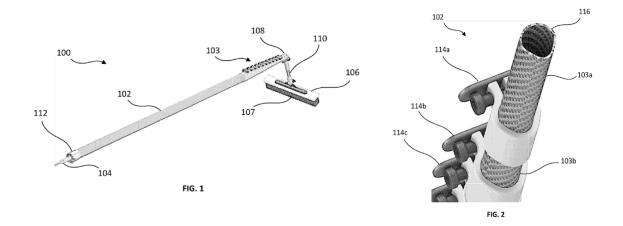
Basis of the Opinion

5. The Requester has requested an opinion requiring consideration of 21 pieces of evidence and 52 pages of arguments. The opinion service is a simple, low-cost, quick service for helping parties resolve disputes. In order to reduce the request to a manageable size, I have restricted my opinion to consideration of independent claim 1 only.

The Patent

6. The Patent relates to a window cleaning pole for cleaning windows or other surfaces of tall buildings. The pole 102 is connected at one end to a source of window cleaning fluid through a fluid supply 104 and at the other end to a head 106 which

includes a fluid outlet. The pole is formed from a plurality of pole members 103a, 103b which are arranged to be telescopically extendable to increase the effective length of the pole. The pole members are provided with clamps 114a, 114b, 114c which can be loosened and tightened to adjust the extent of the pole. The pole members each have a non-circular cross-section and are arranged so that they cannot mutually rotate. (See Figures 1 and 2 reproduced below.)



7. The Patent has 1 independent claim, claim 1, and 19 dependent claims. Claim 1 reads as follows, with the features divided out and labelled for future reference:

1a	Window cleaning apparatus comprising:
1b	an elongate pole
1c	comprising a plurality of telescopic pole members,
1d	each telescopic pole member provided with a clamp operable to clamp the telescopic pole member in an extended position relative to an adjacent telescopic pole member;
1e	a fluid inlet to connect to a source of window cleaning fluid; and
1f	a head provided at a distal end of the elongate pole and comprising a fluid outlet in fluid communication with the fluid inlet;
1g	wherein a sectional profile of each of mutually engaging surfaces of the plurality of telescopic pole members define a non-circular shape, whereby to substantially prevent mutual rotation of the telescopic members around a longitudinal axis of the elongate pole.

Added matter – the law

8. The Requester submits that claim 1 contains added matter. The section of the Act concerning added matter is section 76(2), which reads:

76(2) No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed.

9. In Bonzel and Schneider (Europe) AG v Intervention Ltd [1991] RPC 553, Aldous J described the task of determining whether an amendment to the description had the result that a patent as granted disclosed matter which extended beyond that disclosed in the application as:

 (1) to ascertain through the eyes of the skilled addressee what is disclosed, both explicitly and implicitly in the application;
(2) to do the same in respect of the patent as granted;
(3) to compare the two disclosures and decide whether any subject matter relevant to the invention has been added whether by deletion or addition. The comparison is strict in the sense that subject matter will be added unless such matter is clearly and unambiguously disclosed in the application either explicitly or implicitly.

10. In Richardson-Vicks Inc.'s Patent [1995] RPC 568, Jacob J. summarised this as follows: "the test of added matter is whether a skilled man would, upon looking at the amended specification, learn anything about the invention which he could not learn from the unamended specification."

Whether claim 1 contains added matter

- 11. Claim 1 (feature 1d) specifies "each telescopic pole member provided with a clamp operable to clamp the telescopic pole member in an extended position relative to an adjacent telescopic pole member". This clause was added to claim 1 during prosecution of the Patent. I agree with the Requester that this specific clause was not contained anywhere in the application as filed.
- 12. The Requester refers to paragraph [0053]. I agree that this is the relevant part of the description along with Fig. 2 reproduced above. Paragraph [0053] states:

"A distal end of the first outer telescopic pole member 103b is provided with a clamp 114a. Further outer telescopic pole members (not shown) are also provided with clamps 114b, 114c at distal ends thereof. The clamps 114a, 114b, 114c are each operable to move between an engaged configuration and a disengaged configuration. In the engaged configuration, the clamps 114a, 114b, 114c are each tightened such that the telescopic pole member 103b, 103a immediately within the telescopic pole member 103b, 103a having the clamp 114a, 114b, 114c provided at an distal end thereof is clamped in an extensible position relative to the adjacent telescopic pole member. In the disengaged configuration, the clamps 114a, 114b, 114c are loosened such that the adjacent telescopic pole member is free to slide telescopically within the clamps 114a, 114b, 114c. Thus, an extent of the elongate pole 102 may be adjusted using one or more of the clamps 114a, 114b, 114c."

- 13. The Requester states that the clause of claim 1 adds matter because, "the application as filed discloses only that a clamp is arranged at a distal end of an outer telescopic pole member, to clamp the immediately adjacent, inner pole member in the extended position." The Requester explains further that, "The term "extended position" implies extension towards the head at the distal end of the elongate pole." The Requester concludes, referring to paragraph [0053], that "There is no suggestion in the application as filed that any other clamp arrangement could be used".
- 14. I agree that in the application as filed a specific embodiment is described where a clamp is provided at the distal end of each outer telescopic pole member. The clamp is operable to clamp this outer telescopic pole member to the adjacent inner telescopic pole member. It is also apparent in this embodiment that the pole is extended in a direction towards the head i.e. away from the user.
- 15. The clause in claim 1 defines the clamp arrangement more generally. In particular, claim 1 does not specify where the clamp is positioned. Therefore, the claim potentially covers certain variations where other clamp arrangements could be used. It is clear, however, that the law allows the addition of claim features which state in more general terms that which is described in the specification. What is not allowed is the disclosure of new information about the invention. In this case, there is no disclosure in the claim of any of these possible variations. Therefore, there is no added information. In my view, claim 1 is an acceptable generalisation from the embodiment in the application. In particular, the skilled person on reading the specification and claims together would learn nothing new about the invention, despite the generalisation involved in the added claim feature.
- 16. Therefore, in my view, claim 1 does not contain added matter.

Novelty and inventive step - the law

17. The Requester argues that claim 1 lacks novelty and/or an inventive step in light of evidence provided by the Requester. Section 1(1)(a) of the Act reads:

1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say(a) the invention is new;(b) it involves an inventive step;

The relevant provisions in relation to novelty are found in section 2(1) and section 2(2) which read:

2(1) An invention shall be taken to be new if it does not form part of the state of the art.

2(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either,

or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

19. The provisions in relation to inventive step are found in section 3 which states:

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

- 20. The Court of Appeal in *Windsurfing*¹ 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*.² 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 the 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?

Construction of claim 1

- 21. When considering the validity of the claims of the Patent I will first need to construe them. That is to say I must interpret them in the light of the description and drawings as instructed by Section 125(1). In doing so I must interpret the claims in context through the eyes of the person skilled in the art. Ultimately the question is what the person skilled in the art would have understood the patentee to be using the language of the claims to mean.
- 22. The Requester has defined the skilled person to be a designer or manufacturer of telescopic water fed window cleaning poles. I consider this definition to be rather narrow and instead consider this person to be a designer or manufacturer of window cleaning poles.
- 23. Most of claim 1 is straightforward to construe. There are, however, some terms worthy of further consideration.
- 24. I have considered feature 1d above regarding the clamping mechanism. Although this feature states that each telescopic pole member is provided with a clamp, the skilled person would appreciate that only the outer pole members require a clamp. In particular, the innermost (or distal-most) pole member would be connected to the head connection member rather than another pole and would therefore not require a

¹ Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd, [1985] RPC 59

² Pozzoli SPA v BDMO SA [2007] EWCA Civ 588

clamp. This is explained in paragraph [0053] of the Patent. Further, the skilled person would consider a clamp, from paragraph [0053], to be a fastener positioned on the outside of the telescopic pole member which can be tightened and loosened as required. In the Patent the telescopic pole members are non-circular in profile to prevent mutual rotational of the pole members. The Patent explains that this is important when the clamps are worn or inaccurately manufactured to ensure safe and stable performance of the pole and to manipulate the direction of the head (see for example paragraph [0011]). Therefore, the skilled person would recognize that the clamps should not rely on a rotational movement of the telescopic pole members for their operation.

- 25. Feature 1e requires a *fluid inlet* to connect to a source of window cleaning fluid. From paragraphs [0057] and [0066] the input tube 118 (an internal fluid tube) may function as a fluid inlet to be connected to the fluid supply 104. From paragraph [0048], as the plurality of telescopic pole members are extended, a connection between the fluid supply and the internal fluid tube moves up an internal space of the elongate pole 102. From this, the skilled person would understand that the fluid inlet may be positioned within the elongate pole.
- 26. The Requester provides two arguments that claim 1 lacks novelty and three arguments that claim 1 lacks an inventive step. I will deal with each argument in turn.

Whether claim 1 lacks novelty over the "telescopic lances" in A1

- 27. The Requester submits that claim 1 lacks novelty over the "telescopic lances" shown in A1 which is a PDF catalogue of "Aubrijet Système" dated 2015. The catalogue is currently available online. The Requester has produced evidence from the Internet Archive (A2) that a web page at www.aubretdistribution captured on 11/10/2015 contains a link to this catalogue. I am satisfied that A1 was made available to the public before the filing date of the Patent in September 2016.
- 28. The text of the catalogue is in French. The Requester has provided an English translation where required which I have accepted as a valid translation in each case.
- 29. The Requester specifically refers to pages 10-12 of A1 (which correspond to numbered catalogue pages 8-10 in the bottom right-hand corner of each page). At the top of page 10 a large heading states: "LANCE SPECIFIQUE MULTI FONCTIONS TOTALE FIBRE DE VERRE TRIOVAL" (translated as "specific multifunction lance all trioval glass fibre"). Underneath this is an image of a yellow lance which is reproduced below.



30. Beneath this image is another heading which states: "Kit Lance Multi Fonctions"

(translated as "Multifunction lance kit"). In the list of components below this heading the product is described as "Lance télescopique" (translated as "telescopic lance"). The Requester asserts that the skilled person would recognize that the "Multifunction lance kit" including the "telescopic lance" as depicted on pp. 10-11 of A1 comprises all the elements of claim 1. They draw a similar conclusion based on other lances illustrated in the catalogue but refer particularly to this yellow lance. I will consider the claimed features in turn for this lance.

- 31. Features 1a and 1b require a window cleaning apparatus comprising an elongate pole. The Requester refers to an image on page 11 of A1 showing the lance in use cleaning windows. On this page a function of the lance includes: "Fonction Lavage avec balai spécifique haut débit utilisable avec pompe à pression ou direct service d'eau." (translated as "Washing function with specific high discharge brush usable with pressure pump or direct water service."). I agree with the Requester that this is sufficient to meet the terms of these two features.
- 32. Feature 1c requires the pole to comprise a plurality of telescopic pole members. From the text ("telescopic lance") and corresponding images which show the lance in both a retracted and extended position, I consider this feature also to be anticipated.
- 33. Feature 1d requires each telescopic pole member to be provided with a clamp operable to clamp the telescopic pole member in an extended position relative to an adjacent pole member. The Requester refers to the image of the yellow lance on p.10 which they assert shows two clamps. I am satisfied that the image is clear enough for the skilled person to appreciate that this pole has two clamps that operate in the required way. Therefore, this feature is also known.
- 34. Feature 1e requires a fluid inlet to connect to a source of window cleaning fluid. The Requester refers to the kit on page 10 which includes "Kit raccord service d'eau sur M22F" (translated as "Water service connection kit on M22F"). I agree with the Requester that photographs on page 11 show a supply hose extending from the bottom of the pole. This is sufficient to meet this feature.
- 35. Feature 1f requires a head provided at a distal end of the elongate pole and comprising a fluid outlet in fluid communication with a fluid inlet. The Requester refers to the kit on page 10 that includes "Brosse plate spécifique haut débit sur M22M" (translated as "Specific high discharge flat brush on M22M"). I agree with the Requester that the skilled person would understand from this and the photographs on page 11 that the brush forms the claimed 'head' and that fluid fed into the bottom end of the pole is conducted to the brush at the top. Therefore, this feature is also met.
- 36. Finally, feature 1g requires a sectional profile of each of mutually engaging surfaces of the plurality of telescopic pole members to define a non-circular shape, whereby to substantially prevent mutual rotation of the telescopic members around a longitudinal axis of the elongate pole. The Requester has provided several pages of arguments regarding this feature.
- 37. The first argument involves the image of the yellow lance on page 10; the Requester asserts that after careful inspection the telescopic tubes can 'just be seen' to be non-circular. The Requester further asserts that the skilled person would recognize that

the tubes must be slidingly supported where they pass through the clamps, and so would infer that the respective mutually engaging surfaces of the tubes would conform to the same sectional shape and this would substantially prevent mutual rotation of the telescopic members as required.

- 38. The second argument regards the term "trioval". As noted above, page 10 of A1 states after translation "specific multifunction lance all trioval glass fibre". The Requester asserts that "trioval" is a generic description of shape and means a blended, triangular and oval shape. To support this, the Requester provides a screenshot (A8) showing the earliest definition of "trioval" in Wiktionary dated 27 May 2011 and available online. The entry includes the definition of trioval as: "A shape that is a hybrid of triangle and oval, sometimes used for motor racetracks". The Requester also provides A9 which shows examples of usage of the term trioval (or tri-oval/tri oval) returned by an internet search filtered by date.
- 39. In the third argument, the Requester asserts that the telescopic tubing sections used in the trioval lances depicted in A1, together with the clamps, are in fact the Exel Extender[™] Trioval System[™] produced by Exel Composites Plc. The Requester provides A20 which is a copy of the registration certificate for a Community trademark for the word mark "TRIOVAL" in the name of Exel Oyj. The Requester also provides product information regarding the Exel Extender[™] Trioval System[™] with supporting verification of the dates of publication in A3, A4, A5, A6 and A7. The Requester suggests that in any case the skilled person would be aware of this system and this would confirm to them the meaning of the term trioval and the functional advantage of the trioval shape to prevent mutual rotation of the sections.
- 40. In response to these arguments, despite the similarities, I do not think there is sufficient evidence to confirm that the lances shown in A1 incorporate the Exel Extender[™] Trioval System[™] produced by Exel Composites. There is no mention of Exel or this system in A1 and no suggestion in A1 that the term 'trioval' is a registered trademark. Furthermore, I do not think the skilled person would necessarily be aware of the Exel system as this is a specific system which would not necessarily form part of the common general knowledge of the skilled person. I do accept that the skilled person would understand that the term "trioval" refers to a non-circular, blended triangular and oval shape. However, looking closely at the image of the yellow lance I do not think the skilled person would be able to come to a clear conclusion that the pole members have a non-circular cross-section (even if they considered it was a possibility). I am satisfied that this feature is not disclosed in sufficient detail, either explicitly or implicitly, that it can be said to anticipate the invention as claimed.
- 41. In conclusion, it is my view that claim 1 is novel in light of the telescopic lances in A1.

Whether claim 1 lacks novelty over A12 = US 7832955 B1

- 42. The Requester submits that claim 1 lacks novelty over document A12, patent document US 7832955 B1 (Leffew). A12 was published on 16/11/2010, before the filing date of the Patent.
- 43. A12 is concerned with a windshield ice scraper with a de-icing solution dispenser

that aids in the removal of ice build-up from motor vehicle windshields. I consider this to be a 'window cleaning apparatus' and therefore to meet the terms of feature 1a of claim 1 of the Patent.

44. The windshield ice scraper apparatus 10 comprises a handle 20, a first shaft section 25, a second shaft section 30 and a scraping blade 35 (column 5, lines 51-53 and Fig.1, reproduced below). From column 6 lines 19-21, "The first shaft section 25 comprises a tubular member being slidingly engaged therewith a second shaft section 30 in a telescoping fashion". This meets the terms of features 1b and 1c which require an elongate pole comprising a plurality of telescopic pole members.

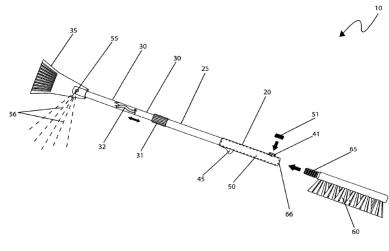


Fig. 1

- 45. I will consider the important final feature 1g next which requires that a sectional profile of each of mutually engaging surfaces of the telescopic pole members define a non-circular shape to prevent mutual rotation. The Requester directs me to column 6 lines 21-25 of A12 which states: "Both the first 25 and second 30 shaft sections have rectilinear shapes and comprise a tubular construction with an outside diameter of the second shaft section 30 particularly sized to fit snuggly and slidingly therein the first shaft section 25". At first reading this appears to meet the requirements of feature 1g. The term 'rectilinear' seems to imply a square or rectangular sectional profile.
- 46. However, later in this quoted passage the term 'diameter' implies a circular crosssection. Further, in column 7 lines 5-10, the position of a battery/compartment is described within the second shaft section as follows: "The battery/compartment 72 is to be made using similar materials as the second shaft section 30 being flush thereto an outer cylindrical surface of said second shaft section 30 being affixed using a common threaded fastener in an expected manner". Although not entirely clear, this passage seems to suggest a cylindrical shape, i.e. circular cross-section, for the second shaft section. Finally, claim 2 of A12 states, "said first and second shaft sections have rectilinear shapes aligned along a linear path". It is possible that 'rectilinear shapes' refers to the cross-sectional shape in the longitudinal direction, which would be rectangular for a cylinder, and the emphasis is on ensuring that the two cylinders are aligned in the longitudinal or linear-path direction so that the telescopic action is effective. Therefore, on balance, I think there is sufficient

ambiguity in the interpretation of A12, such that the skilled person could not conclude with the necessary degree of certainty that A12 meets the terms of feature 1g.

47. Therefore, without feature 1g, in my view claim 1 is novel in light of A12.

Whether claim 1 lacks inventive step over A10, A11, and the common general knowledge, in light of A3

- 48. In order to assess whether claim 1 lacks an inventive step, I will follow the established 4-step Windsurfing/Pozzoli approach outlined above.
- 49. Steps 1(a) and 1(b) require me to: *identify the notional "person skilled in the art" and the common general knowledge of that person.*
- 50. As discussed above I consider the skilled person to be a designer or manufacturer of window cleaning poles.
- 51. Regarding step (1b), the Requester has asserted that the skilled person's common general knowledge would include an awareness of the range of commercial products available on the market and in particular an awareness of the technical features that distinguish one product from another. Further, the Requester claims that this common general knowledge would encompass the conventional arrangement of telescopic water fed window cleaning poles with clamps for holding the tubular sections in the selected position. The Requester also states that the skilled person would be aware of particular (see A10, A11 discussed below) and similar YouTubeTM videos produced by professional window cleaners and relevant manufacturers/retailers. Further given their number and popularity, the Requester asserts that such material can be regarded as representative of, or forming part of, the skilled person's common general knowledge.
- 52. In response, I consider that the common general knowledge of this person would include an awareness of well-known commercially available window-cleaning poles and accessories but would not necessarily include the details of all such commercial products available or the contents of all relevant online videos. I agree, however, that the skilled person would be aware of a conventional window cleaning arrangement comprising a telescopically extending window cleaning pole where window cleaning fluid is passed up a tube within the pole from a fluid inlet to a head comprising a plurality of bristles (as described in the discussion of the prior art in paragraph [0003] of the Patent). They would also be aware of common means of securing the telescopic pole members in position including external clamps.
- 53. In step (2) I need to: *identify the inventive concept of claim 1.* I consider this simply to be claim 1 (features 1a -1g) as construed above.
- 54. In step (3) I need to: Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of claim 1.
- 55. The Requester refers to A10 which is a YouTube[™] video by "Wagga" entitled "Gardiner SL-X 35 Review – Carbon fibre window cleaning pole". The video is captioned with a date of 27 July 2015. I am satisfied that it was made available to the

public before the filing date of the Patent. In the video a user demonstrates a telescopic window cleaning pole. In particular, the user demonstrates a series of clamps operable to clamp the telescopic pole members in position. The skilled person would see that the pole is connected to a source of fluid via an inlet and the fluid emerges via a head in the form of a brush.

- 56. I agree with the Requester that A10 meets features 1a-1f of claim 1. I further agree that the difference between this disclosure and the inventive concept of claim 1 is that A10 does not disclose feature 1g i.e. there is no mention of the sectional profile of the pole members in A10 defining a non-circular shape.
- 57. The Requester provides a product brochure A3 (already mentioned above) produced by Exel Composites Plc of Finland, entitled Exel Extender Telescopic System[™]. Further documents A4-A7 provide evidence that A3 was made available to the public before the filing date of the Patent. A3 describes the Extender[™] Trioval System[™] and explains that this system "prevents rotation of the tubes during operation". Also we are told, "the customer chooses the tube shapes to fit the application". Underneath this description, a locking system is described as follows: "Two or three part units are available with a simple, yet efficient, positive clamp lock between each section." Images of the tube illustrating its non-circular shape and a clamp lock are provided and reproduced below. At the end of the brochure a list of suggested applications include 'window cleaning'. The brochure provides technical details of different telescopic tube units including tube diameters, unit length, material and weight.



58. It is useful to also identify the differences between this disclosure and the inventive concept of claim 1. The skilled person would recognize a telescopic pole with clamps to clamp the pole members in position i.e. features 1b, 1c and 1d of claim 1. The skilled person would also see that the pole members have a non-circular (trioval) sectional profile which prevents mutual rotation of the pole members, feature 1g. A3 does not specifically describe how the system can be used for window cleaning with the required fluid inlet, head and fluid outlet and therefore does not disclose features 1a, 1e and 1f.

- 59. Finally, in step (4) I need to consider whether: those differences constitute steps that would have been obvious to the person skilled in the art.
- 60. The Requester refers to another YouTube[™] video A11 entitled "Stiffness & Flex Comparison for Waterfed Poles 2013 (25-35ft Range)". I am satisfied that this video was made available to the public before the filing date of the Patent. Here, a user discusses technical features such as materials, weight, stiffness and length of different telescopic window-cleaning poles and the merits of the different parameters. There is no suggestion in A11 of non-circular-shaped poles. The Requester suggests that this video (along with other similar videos) demonstrates that the structure of the pole sections is a topic of considerable interest in the relevant technical community. The Requester also suggest that the popularity of A11 (over 16000 views) demonstrates that the skilled person would be interested in any development in the structure of telescopic tubular sections suitable for use in telescopic water-fed window cleaning poles.
- 61. The Requester concludes as follows:

The skilled person would be aware of **A3** because a principal defining characteristic governing the commercial success of telescopic water-fed window cleaning poles is the stiffness-to-weight ratio of the telescopic pole sections, as evidenced by **A11**. Consequently, any technical developments in the field of lightweight telescopic pole sections for use in window cleaning or other hand-held applications would catch his attention.

A3 would suggest to the skilled person to use the Extender[™] Trioval System[™] telescopic tubes in the construction of a telescopic water fed window cleaning pole, in order to prevent rotation of the tubes in use.

Starting from the prior art as evidenced by **A10**, and further by **A11** and by the preamble of the impugned patent, this leads without inventive effort to the apparatus of claim 1 of the impugned patent.

- 62. In response, starting from the prior art as evidenced by A10, the difference between this disclosure and the inventive concept of claim 1 is the absence in A10 of noncircular pole members. I do not consider all the information disclosed in A11 and A3 to be part of the common general knowledge of the skilled person. Specifically, noncircular poles are not part of this common general knowledge. Nonetheless, I agree that the skilled person would be familiar with technical issues such as stiffness-toweight ratio of the telescopic pole members. However, there is no discussion in A10 of the cross-sectional shape of the pole members and no suggestion that this is a design feature that could be improved. There is no incentive for the skilled person on viewing A10 to improve the poles by changing their sectional profile. Therefore, it does not seem likely that the skilled person would consider the specific teachings in A10 and A3 together. Thus, I do not see how starting with A10 in this way would lead to the inventive concept of claim 1.
- 63. However, I do consider that A10 illustrates some features of the common general knowledge of the skilled person i.e. a telescopically extending window cleaning pole where window cleaning fluid is passed up a tube within the pole from a fluid inlet to a head at the distal end. Armed with this knowledge the skilled person on reading the

brochure A3 would realise that the Extender[™] Trioval System[™] would be suitable for window cleaning applications. This would be confirmed from the list of applications at the end of A3. The skilled person would be able to choose the most appropriate components from the technical details provided in the brochure to build a suitable window cleaning apparatus. Moreover, using their common general knowledge and expertise in the art they would be able to include a fluid inlet connected to a source of window cleaning fluid and a head at the distal end of the pole comprising a fluid outlet to arrive at what is claimed in claim 1. This would be possible, in my view, without exercising any inventive ingenuity.

64. Therefore, I consider claim 1 to lack an inventive step over A3 and common general knowledge as illustrated by A10.

Whether claim 1 lacks inventive step over A21 in light of A3

- 65. The Requester submits that claim 1 lacks an inventive step over A21 in light of A3 disclosing the Exel Extender[™] Trioval System[™].
- 66. Steps 1 and 2 of the 4-step Windsurfing/Pozzoli approach are the same as those discussed in the previous section. I will therefore just consider steps 3 and 4.
- 67. Regarding step 3, A21 is a web page entitled "Robinson-Solutions Professional Window Cleaning", including a link to a video captioned "The Carbo Clean Water Fed Pole". I will consider the web page and video together as a single disclosure. The web page includes the date, 26 June 2009. I am willing to accept that both web page and video were made available to the public before the filing date of the Patent. The web page explains that the Carbo Clean Pole is a low-weight, window cleaning pole consisting of a number of pole sections. This meets the terms of features 1a and 1b of claim 1 of the Patent.
- 68. The pole has a brush at one end, and it is clear from the video that window cleaning fluid is fed through a tube to be discharged from the brush. This anticipates features 1e and 1f.
- 69. Instead of a telescopic system the web page explains that adjacent pole sections have conical parts that slide into one-another end to end. To secure them in place, a releasable stainless-steel spring clip in the lower part locks in a recess in the upper part. The length of the pole can be increased by including more pole sections. The web page explains that the pole has a 'special shape' so that it is easy to recognize the front and rear of the pole and the brush will always be correctly positioned to the face of the glass. Such non-circular poles are illustrated in an image on the web page (see image reproduced below).



- 70. Therefore, the difference between the disclosure in A21 and the inventive concept of claim 1 is that A21 does not disclose *telescopic* pole members with *clamps* operable to clamp the pole members in an extended position (features 1c and 1d). A21 discloses pole members defining a non-circular shape but because they are not telescopic, A21 does not meet feature 1g.
- 71. Regarding step 4, the Requester asserts that A3 discussed previously discloses features 1c, 1d and 1g of the Patent and argues that:

The skilled person would note from **A3** that "The Extender™ Trioval System™ prevents rotation of the tubes during operation."

He would further note from **A3** that the "trioval" telescopic pole members are suitable for use in applications including "Professional and residential cleaning; mopping, window cleaning, ...".

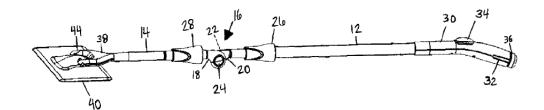
Starting from the disclosure of **A21**, the skilled person would thus understand from **A3** that the non-circular tubes of **A21** could be clamped together in a telescopic arrangement to prevent mutual rotation of the tubes, in the same way as the similarly shaped tubes of **A3**, instead of connecting them together end-to-end. The skilled person would thus arrive at the invention of claim 1 without inventive effort.

72. In response, I agree that A3 discloses non-circular telescopic poles with clamps. The question is whether the skilled person with knowledge of the disclosure in A21 would look to the disclosure in A3 to arrive at what is claimed in claim 1. One feature of the system in A21, as the web page explains, is that as a result of the spring clips, "you can slide out both parts again. You can easily store the separate poles into the special movable and collapsible Carbo Clean Pole cart." Also, a particular advantage of the system in A21 is the 'extremely low-weight' of the pole. Regarding this we are told, "So, if you have to clean at a lower height, simply do not use all the sections, thus reducing the overall weight". The skilled person would appreciate that the objective in A21 is to have a low-weight pole and just clip on extra sections if needed and store the others. There is no incentive from this for the skilled person to produce a heavier telescopic pole where typically all the sections are included at once and the user extends them as required. Therefore, in my view the skilled person with knowledge of A21 would not look to A3 and thus would not arrive at the invention of claim 1 without inventive effort.

73. Therefore, I consider claim 1 to involve an inventive step over A21 in light of A3.

Whether claim 1 lacks inventive step over A13 in view of A10, A11, and the common general knowledge

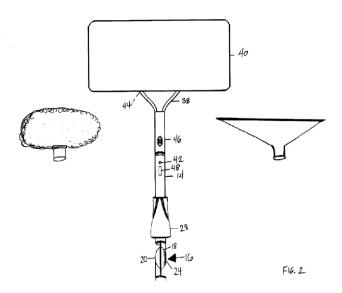
- 74. The Requester submits that claim 1 lacks an inventive step over A13, patent document US 2011/0056035 A1 (Burbacki) in view of A10, A11 (discussed previously), and the common general knowledge. A13 was published on 10/3/2011, before the filing date of the Patent.
- 75. Again, I will move straight on to steps 3 and 4 of the Windsurfing/Pozzoli approach.
- 76. Regarding step 3, A13 discloses an adjustable pole for washing windows. In particular, the pole can be used to clean the exterior of a window from the inside of a building. The pole comprises a first housing 12 and a second housing 14, which are connected by an adjustable joint 16 (paragraph [0016] and Fig.1 reproduced below). According to paragraph [0017]: "Preferably the first housing 12 and the second housing 14 are telescopic, and are controlled by the first release 26 and the second release 28". Further, from paragraph [0029]: "Rather than just have a single housing on each side of the joint, there could be multiple housings with housings within housings, where the housings get progressively narrower and so are able to collapse into one another". Therefore, A13 meets features 1a-1c of claim 1 of the Patent.



- 77. Regarding feature 1d, from paragraph [0017], "Each release encircles a portion of the housing that it controls, and when twisted in one direction causes the housing to extend, and when twisted in the opposite direction causes the housing to retract. Although in the present embodiment the releases are operated by twisting, which allows the user to maintain precise control over the length of the housing, the releases can take other forms as well, such as buttons that when pressed release an inner locking mechanism and allow the housings to be extended and retracted." I do not consider these releases to be the required 'clamps' of claim 1 as construed previously because the releases function via either a twisting or internal locking mechanism. Therefore, A13 does not meet feature 1d.
- 78. According to paragraph [0016] of A13, attached to the first housing 12 is a handle 30 which can receive a fluid bottle 36 which screws into a threaded mount 50 contained within the handle. An inner tube 52 has one end extending into the fluid bottle 36. The inner tube 52 further extends through the first housing 12, the adjustable joint 16, and the second housing 14, with a second end of the inner tube 52 attaching to a fluid nozzle 48. I agree with the Requester that the inner tube 52 forms a fluid inlet to

connect to a source of cleaning fluid in the form of the bottle 36. This meets the terms of feature 1e.

79. From paragraph [0016], attached to the second housing 14 via attachment point 42 is a fork 38 and attached to this is an attachment head 40. Wiping cloths can be affixed to the attachment head 40 (paragraph [0020]). From paragraph [0021], "The invention is used by attaching an appropriate attachment piece or pieces, such as a fork with an attachment head or just an attachment head". Although the fluid nozzle 48 is typically below the fork attachment point 42 (see Fig. 2 reproduced below), we are told in paragraph [0020] that the fluid nozzle could be placed at other locations, such as "in the attachment piece". Regarding feature 1f of claim 1 of the Patent, I consider the fork 38 and/or the attachment head 40 to be the required head which comprises a fluid outlet in the form of the fluid nozzle 48. Therefore, A13 meets the terms of feature 1f.



- 80. Regarding feature 1g, paragraph [0017] states that: "Although in the present embodiment the housings 12 and 14 are cylindrical, the housings 12 and 14 can have other shapes such as being octagonal, heptagonal, decagonal, and other similar shapes that are not cylindrical but that still are conducive for holding and gripping." The Requester suggests initially that the skilled person would infer that a non-circular section would define the shape of each of mutually engaging surfaces of the plurality of telescopic pole members and so would expect this arrangement to substantially prevent mutual rotation of the telescopic members around a longitudinal axis of the elongate pole as required by claim 1 of the Patent. Although non-circular housings are certainly disclosed, there is no mention of each telescopic member also being non-circular. I do not think this necessarily follows from the disclosure in A13. Therefore, I do not consider that A13 meets feature 1g.
- 81. Thus, the differences between the disclosure in A13 and the inventive concept of claim 1 are features 1d and 1g regarding the telescopic members being provided with clamps and having sectional profiles of a non-circular shape to prevent mutual rotation.
- 82. Regarding step 4, I will begin with the latter feature 1g. The Requester asserts that:

[T]he skilled person would consider it obvious to arrange the non-circular section of the respective elements of the housings to define a sectional profile of each of mutually engaging surfaces thereof, so as to substantially prevent mutual rotation of the telescopic members around a longitudinal axis of the elongate pole, because this would be the simplest implementation of the disclosed structure.

- 83. In response, we are told in A13 that the housings may have a non-circular shape and also that they may be telescopic. However, these features are not discussed together. The shapes disclosed in A13, i.e. "octagonal, heptagonal, decagonal, and other similar shapes that are not cylindrical but that still are conducive for holding and gripping" appear to be those quite similar to a circle in that they have a large number of sides (8, 7, 10) and are likely to have rotational symmetry. Indeed, the idea is that they are conducive for holding and gripping which presumably means that there are no sharp corners. Therefore, to create a telescopic system without any mutual rotation, the skilled person would need to choose concentric tubes that nested together to prevent rotation but still allowed for telescopic action. This would require some engineering design and is unlikely to occur by accident. The Requester has suggested that this would be "the simplest implementation" but has not provided any evidence on how this would be achieved. From the evidence provided with this Request it seems that cylindrical telescopic poles with circular cross-section are the most common with some disclosure of trioval shapes (A3). I have seen no evidence from A10, A11 or elsewhere of creating non-rotating telescopic systems involving high-order polygon shapes. I am not convinced that the skilled person would have sufficient direction from A13 and their common general knowledge to achieve this task, which seems to me to go beyond a routine workshop development. Without this feature I do not need to consider the other difference regarding the clamps, which would in any case depend on the telescopic system involved.
- 84. Therefore, I consider claim 1 to involve an inventive step over A13 in view of A10, A11 and the common general knowledge.

Opinion

- 85. It is my opinion that claim 1 does not add matter. It is also my opinion that claim 1 is novel over both the "telescopic lances" shown in A1 and patent document US 7832955 B1 (A12). Further, it is my view that claim 1 involves an inventive step in light of the arguments involving the Carbo Clean Pole disclosed in A21 and those involving patent document US 2011/0056035 A1 (A13).
- 86. I consider claim 1 to lack an inventive step over A3 disclosing the Exel Extender[™] Trioval System[™] in light of the common general knowledge of the skilled person.

Application for review

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

Susan Dewar Examiner

NOTE

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