OPINION UNDER SECTION 74A

Patent	EP 2834423 B1
Proprietor(s)	Planet 42B Limited
Exclusive Licensee	
Requester	Moreland IP on behalf of Planet 42B Limited
Observer(s)	Groupe Vidon Intellectual Property on behalf of Greenov
Date Opinion issued	25 October 2024

The request

- 1. The Comptroller has been requested by Moreland IP ("the requester") to issue an opinion as to whether the claims of EP 1642841 B1 ("the patent") are infringed by the underwater noise mitigation system known as SubSea Quieter ("the product") detailed in the request.
- 2. The request includes the following evidence:

Appendix A - EP 2834423 B1

Appendix B - EP 2402511 A1

Appendix C – Copy of the written opinion of the international searching authority

Appendix D – Extract from GreenOv website https://greenov.green/solutions/subsea-quieter/#

Appendix E – Screenshots from SubSea Quieter Pile driving video.

Observations and observations in reply

- 3. Observations were received from Groupe Vidon Intellectual Property on behalf of GreenOv ("the observer") which include argument as to why the product does not infringe the patent.
- 4. Observations in reply were subsequently received from the requester.

The patent

- 5. The patent, EP 2834423 B1, is titled "OFFSHORE STRUCTURES AND ASSOCIATED APPARATUS AND METHODS". It was filed on 2nd April 2013 with a priority date of 29th March 2012, published on 11th February 2015 and granted on 23rd October 2019. The patent remains in force.
- 6. The patent relates to the field of structures, such as offshore structures, associated apparatus and methods. In particular, though not exclusively, it relates to offshore structures, such as wind turbine structures, for example, piles for offshore wind turbines, and associated apparatus and methods.
- 7. The patent explains that during installation of an offshore wind farm, supporting piles are driven into the seabed in order to support each tower, nacelle and turbine. These piles are generally transported to the desired location, and then hammered into position using a pile hammer, which mechanically connects with the upper region of the pile. There is an increasing concern that the noise emitted during this hammering process is harmful to the environment, and in particular the subsea environment.
- 8. The patent references EP 2402511 A1 which describes a template for use in installing a plurality of foundation elements, in particular anchor piles, relative to one another in an underwater ground formation. The template comprises a plurality of guides for the foundation elements, which guides are fixed relative to one another by means of a frame. At least one of the guides comprises a sound-insulating sleeve for surrounding a foundation element during driving.
- 9. The aim of the patent is to improve the noise insulation of the template known from EP 2402511 A1. The patent provides an apparatus to provide an acoustic barrier between a pile and a surrounding body of water, during deployment of a pile (e.g. locating a pile in the seabed). The acoustic barrier may be configured to dampen (e.g. absorb, or at least attenuate) pressure waves that would otherwise be communicated from a pile to surrounding water.
- 10. Figure 1a shows a guide apparatus 100 for positioning/deploying an offshore pile 200. The apparatus comprises a guide portion 110 and a piling template 120. In use, the piling template 120 is positioned on a water floor 300 (e.g. seabed, or the like). In this example, the guide portion 110 is configured essentially as a sleeve, through which the pile 200 can be positioned. The piling template 120 comprises four guide sockets 125. Each guide socket 125 is specifically configured to allow for location of the guide portion 110 with the piling template 120. The guide portion 110 is configured to locate, and be positioned with, the template 120 (or the socket 125 thereof) to allow for guiding of the pile 200 to the water floor 300.
- 11. The guide apparatus 100 further comprises a guide cone 145 on an upper region thereof. The guide cone 145 is configured to allow for the pile 200 to be lowered and located with the apparatus 100. In use, the guide portion 110 may extend above, and out of, the water level 310 (see figures 2a-2c below).

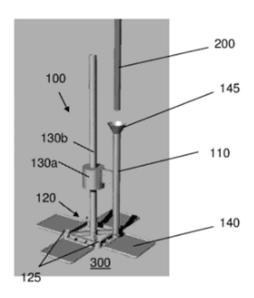
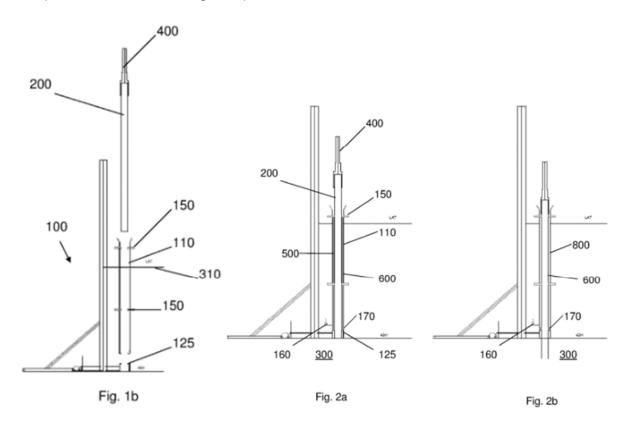


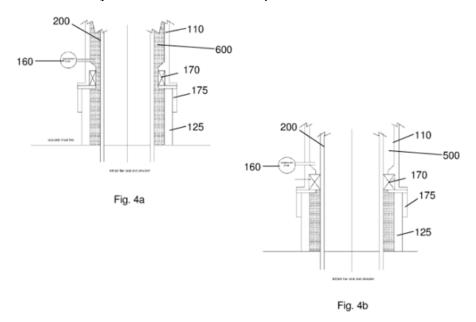
Fig. 1a

12. To allow the pile 200 to be located within the apparatus, the apparatus 100 may also comprise arms 150 at the guide portion 110.



13. Figures 4a and 4b below show a seal 270 having a pump 160 and is shown at a lower region of the guide portion 110. In Figure 4a, the pile 200 has been positioned provisionally on the water floor 300 (e.g. seabed). The guide portion 110 has been located with a first socket 125. In this example, the guide portion has a locator 175, which can be provided as a lip or collar, in order to locate the guide portion 110 with the socket 125.

14. Figure 4a shows the gap 500 filed with water 600. In Figure 4b, the seal has been radially inflated in order to seal the apparatus 100 with the pile 200. In addition, the pump 160 has displaced the water from the gap to the body of water. Subsequently, the pile can be driven by the hammer 400 and positioned in the seabed.



- 15. As shown in Figure 2 above, the apparatus further comprises a dampening structure or material 800. The dampening material 800 provides a difference in acoustic impedance between the apparatus (e.g. the guide portion 110) and surrounding water.
- 16. Figure 10 shows apparatus 3000, which comprises a dampening structure or material, which may be used as an acoustic barrier. Here, the apparatus 3000 is shown having two dampening segments 3010. In other examples, one or more than two dampening segments 3010 may be provided.

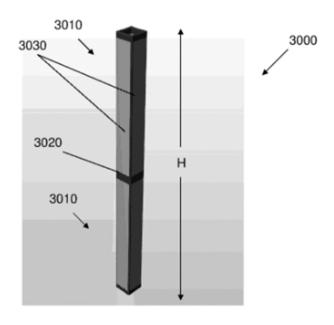
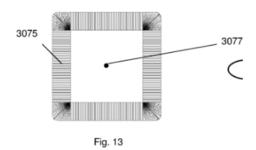


Fig. 10

17. Figure 13 below shows an example in which the internal cross-section of the segment 3010 comprises a specific material 3075, structure or fabric, having a particular orientation across the segment. In this example, the inner material 3075 is permeable to fluid (e.g. air) and is orientated radially to an axial centre line 3077. The inner material 3075 is a thread type fabric (e.g. a drop-stitch type fabric) orientated appropriately such that threads are provided radial to the centre line 3077. In such a manner, the segment 3010 can be configured to adopt a particular desired shape or configuration when inflated. In addition, the outer surface (and inner surface) of the segment can be substantially rigid, when inflated.



- 18. The patent has 15 claims including two independent claims 1 and 13. Claims 1 and 13, adopting the references used by the requester, read:
 - 1.A Guide apparatus (100, 1000) for an offshore pile (200),
 - 1.B the apparatus comprising a guide portion (110, 1100) configured to provide an acoustic barrier between a pile and a surrounding body of water during deployment of a pile at a body of water,
 - 1.C wherein the guide portion comprises a dampening structure configured to provide the acoustic barrier,
 - 1.D the guide portion comprising one or more segments (3010),
 - 1.E said guide apparatus (100, 1000) being characterized in that each segment comprises an inner fabric material (3075) which is of dropstitch type.
 - 13.A A method for deploying an offshore pile at an offshore site, comprising:
 - 13.B locating an offshore pile with a guide portion of guide apparatus at an offshore site
 - 13.C and providing an acoustic barrier between the pile and a body of water,
 - 13.D wherein the guide portion comprises a dampening structure configured

to provide the acoustic barrier,

- 13.E the guide portion comprising one or more segments,
- 13.F each segment comprising an inner fabric material which is of dropstitch type,
- 13.G then securing the pile to a water floor at the offshore site.

Claim construction

19. Before I can consider whether the patent could be infringed, I need to construe the claims of the patent – that is to say, I must interpret them in the light of the description and drawings as instructed by Section 125(1):

125(1) For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

- 20. 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. This approach has been confirmed in the recent decisions of the *High Court in Mylan v Yeda*¹ and the *Court of Appeal in Actavis v ICOS*².
- 21. In order to interpret the claims through the eyes of the skilled person, they must first be identified. I consider the person skilled in the art to be a designer and manufacturer in the field of structures and in particular offshore structures. The person skilled in the art would have knowledge of apparatus and methods for driving supporting piles into the seabed or ground.
- 22. The original request included comments relating to claim construction. Firstly, when considering the interpretation of claims 1 and 13, one should take into consideration the wording thereof construed in accordance with the disclosure of the patent, along with the closest prior art (EP 2402511 A1 referenced in the patent) which was responsible of the two-part formulation of claim 1.
- 23. The observer argues that this is not the correct way to approach claim construction. As per section 125(1), the invention "shall…be taken to be that specified in a claim of the specification…as interpreted by the description and any drawings contained in that specification". This includes reading the "specification as a whole" (section 125.17.1 of the Manual of Patent Practice). The observer contends that the

¹ Generics UK Ltd (t/a Mylan) v Yeda Research and Development Co. Ltd & Anor [2017] EWHC 2629 (Pat)

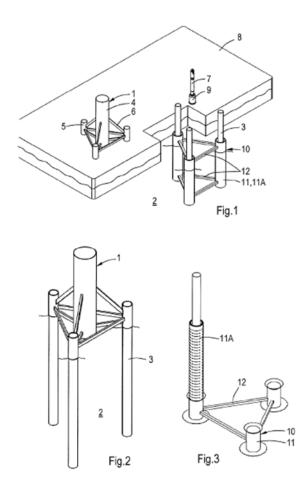
² Actavis Group & Ors v ICOS Corp & Eli Lilly & Co. [2017] EWCA Civ 1671

requestor's approach of construing the claim term "guide portion" using EP 2402511 A1 and the isolated paragraph [0012] is not interpreting using the specification as a whole.

- 24. Although ideally it should be possible to ascertain the scope of any claim of a specification without recourse to other documents, there may be instances where reference the prior art acknowledged in the patent is necessary to properly construe a claim. In this instance I am minded to agree with the observer that the claims can be construed from reading the specification as a whole and recourse to EP 2402511 A1 is not necessary for the skilled person to understand their meaning.
- 25. However, although I do not consider it necessary to turn to EP 2402511 A1 to properly construe the claims, I will briefly contemplate what the skilled person would learn from its disclosure as the requester has relied on it in their argument. As explained by the requester, they consider the preamble of claim 1 i.e. features 1.A-1.D to be disclosed in EP 2402511 A1. This is consistent with the view of the examiner during prosecution of the application pre-grant. To overcome EP 2402511 A1 the independent claims were amended to include the characterising feature that each segment comprises an inner fabric material which is of drop-stitch type i.e. features 1.E and 13.F.
- 26. EP 2402511 A1 discloses shows a system for installing a jacket 1 in an underwater ground formation, e.g. a seabed 2, by means of anchor piles 3. The jacket 1 comprises a central cylinder 4 and a plurality of hollow cylindrical support members or feet 5 connected to the central cylinder 4 by means of a frame 6 and arranged in a pattern. The central cylinder is intended to serve, after installation of the jacket on the seabed, as the foundation of a wind turbine. The system further comprises an hydraulic driver 7 connected to a power pack on board of a surface vessel 8. The driver 7 comprises a driver sleeve 9 for securely mounting the driver 7 on an anchor pile 3.
- 27. The system further comprises a template 10 for positioning and driving a plurality of anchor piles in the seabed in a predetermined pattern corresponding that of the support members of the jacket. The template comprises a plurality of guides 11 for the piles which guides are fixed relative to each other by means of a frame 12. In the embodiment shown in Figure 1 below, each guide 11 comprises a sound-insulating sleeve 11A, made of e.g. steel, for surrounding a pile during driving to reduce noise input from the driver into the surrounding water. The inner wall of the sleeves is provided with a plurality of guide elements to guide the pile. Separating sets of guide elements in the axial direction provides a substantial guiding length and thus further increases stability of the piles during driving.
- 28. Figure 3 of EP 2402511 A1 below is a perspective view of a second template 10 comprising a plurality of guides 11 having flared ends, and a single sleeve 11A. The sleeve 11A is in most respects identical to the sleeve described above, except that it is removable from the guides. To this end, the outer diameter of the sleeve 11A is slightly smaller than the inner diameter of the cylinders 11.
- 29. To my mind, the skilled person is taught by EP 2402511 A1 that the templates 10 have guides 11 either each having noise-insulating sleeves 11A or a single removable noise-insulating sleeve 11A. The sleeves provide a guiding function for a

pile. The skilled person is also taught that the sleeves 11A, whether attached to or removable from the guide 11, preferably extend from the template base to protrude from the surface of the water with paragraph [0027] describing:

"In general, it is preferred that, once the template is in place, the soundinsulating sleeves extend from the ground formation to above the water level. The upper rim of each of the sleeves can be provided with a detachable extender, to adjust the effective length of sleeve to the depth of the water at the location where the foundation elements are to be installed."



- 30. The second point of interpretation forwarded by the requester is that "drop-stitch" is a known term in the art of fabrics and weaving. It is also referred to as "dropstitch" or "drop stitch". Drop stitch is a 3D construction by which a plurality of yarns are used to join both a first and second layer of fabric. The yarns between the fabric layers can work together to create a string 3D unit when inflated. Drop-stitch is now utilised in a wide variety of applications. The observer hasn't provided any argument to counter this interpretation of "drop-stitch" but has explained in their observations that drop-stitch technology was very well-known before the filing date of the patent. I am content that the skilled person would have no issue in construing the meaning of the feature of the fabric being a drop-stitch type.
- 31. The observer has argued that the preamble of claim 1 which requires the guide portion to comprise a noise dampening structure and one of more segments is unclear and causes difficulty in understanding the meaning of the claim. To my

mind, the person skilled in the art reading the patent as a whole and trying to understand its meaning would consider claim 1 to define something very similar to the embodiments in figures 2b, 9b having dampening structures 800, 1800 respectively and figure 10 having segments 3010. In my opinion, the meaning of the guide portion having a dampening structure is that the guide portion has a structure or is formed of a material that provides a dampening effect to reduce acoustic transmission from a pile to the surrounding body of water. Many examples of structures or materials that would provide such a dampening effect are provided in the patent. Further, the guide portion having one or more segments means it can be formed of a single segment or multiple segments 3010 attached together e.g. by segment joints 3020 as shown in figure 10.

- 32. The observer has further argued that it is not clear if the characterising part of claim 1 requires the dampening structure to be provided on an inner and/or outer surface of the guide portion. Paragraph [0037] of the patent describes that the dampening structure may be provided on an inner and/or outer surface of the guide portion with paragraph [0080] providing the example of the dampening material being provided as a coating, layer, or the like, on the inner and/or outer of the guide portion. From reading the patent as a whole, the skilled person would understand that the dampening structure could be provided on either the inner or outer of the guide portion or both. In my opinion, the fact that claim 1 does not define whether the dampening structure is providing on the inner and/or outer of the guide portion does not render the claim unclear.
- 33. In their observations in reply, the requester has explained that the use of reference numerals in claims is only indicative and non-limiting. I agree as this is a long-established principle.
- 34. The main area of contention between the requester and the observer lies in how the feature of the "guide portion" of claims 1 and 13 should be interpreted. The requester in their analysis of the alleged infringing product has argued that a template, such as the template disclosed in the patent and EP 2402511 A1, for use with guiding apparatus 100 is a guide portion within the scope of claims 1 and 13. The requester has also argued that the over boarding collar disclosed with the product is also a guide portion within the scope of claims 1 and 13.
- 35. The observes disagrees with the requester's interpretation of the scope of the feature of a guide portion. The observer does not agree that the template or the over boarding collar constitute a guiding portion with the meaning provided by the patent.
- 36. There would appear to be agreement that templates, such as template 120 disclosed in the patent and further disclosed in EP 2402511 A1, are well-known in the art. The templates include guides for piles such as sockets 125. The requester contends that such guides on the templates constitute a guide portion within the scope of the independent claims. The requester relies upon the disclosure of EP 2402511 A1 and also paragraph [0159] of the patent which reads:

"It will also readily be appreciated that while some of the above examples of the guide apparatus 100, 1000 have been illustrated with use of a piling template 120, 1200, or the like, in further examples the guide apparatus 100, 1100 may comprise one or more guide portions 110, 1100 without the use of a piling template 120, 1200, per se. Such guide portions, or sleeves, may be used in isolation (e.g. manoeuvred and surrounding a monopile, or the like), or may be used in conjunction with further apparatus. Similarly, in some examples the piling template may be used without the use of a guide portion. Such embodiments will be evident given the above detailed description."

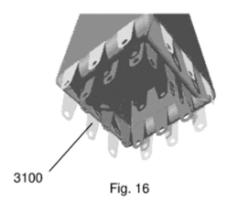
- 37. Throughout the patent the guide apparatus is described as having a guide portion which can be used with a template to locate and guide a pile to the seabed. The guide portions are received by the guide sockets of the template. The patent further teaches the skilled person that the guide portion can be used in isolation without a template. The above paragraph [0159] highlighted by the requester does also state that "in some examples the piling template may be used without the use of a guide portion". However, this would appear to contradict the requirement of the independent claims that the guide apparatus has as guide portion. Furthermore, there is no disclosure of how using only a template in isolation without a guide portion is achieved. In addition, the disclosure of EP 2402511 A1 only discloses the use of a template with sound-insulating sleeves. There would appear to be no enabling disclosure of a template being used without a sound-insulating sleeve or guide portion wherein the template provides the acoustic barrier itself. There is no disclosure in the patent of the guide sockets of the template comprising a dampening structure configured to provide the acoustic barrier or further that they are formed with an inner fabric material which is of drop-stitch type. Therefore, in my opinion the skilled person is not taught by the patent that the template with guide sockets by itself can be considered to be a guide apparatus having a guide portion as required by the independent claims and thus would not construe the independent claims in that way.
- 38. Further, the feature of the guide apparatus including a template is introduced into the claims in dependent claims 8 and 15. As a result, in my view the patent teaches the skilled person that the guide portion and the template are separate parts of the guide apparatus. I do not agree that the template can be considered to constitute the guide portion as required by the independent claims.
- 39. In their observations, the observer also argues that with the product there is no guiding below the surface of the water and that a guide portion that is arranged only at water surface level is not covered by the independent claims of the patent. The observer states that the description does not allow for the guide portion to be interpreted in any other way than by use of a guiding portion resting on the seabed (directly or via a template) to guide the pile to the seabed during installation.
- 40. The purpose of the invention as set out in paragraph [0013] the patent is "to improve the noise insulation of said template known from EP2402511A1." This is achieved through a guide portion configured to provide an acoustic barrier between a pile and a surrounding body of water during deployment of a pile at a body of water. In my view, the skilled person is clearly taught by the patent that the guide portion would need to be located within the body of water during deployment of the pile at the body of water. The patent teaches the skilled person that deployment of the pile means "locating the pile in the seabed" (see paragraph [0014]) and "such as hammered into the seabed" (see paragraph [0023]). As a result, I agree with the observer that a guide portion that is arranged only at water surface level would not fall within the scope of the independent claims of the patent.

41. With regard to the observer's arguments that the guiding portion has to rest on the seabed (directly or via a template) to guide the pile to the seabed during installation, the patent explains that the guide portions can be used with a template, in isolation or with other apparatus. The patent provides two embodiments showing the guide portion being used with a template. There is no example embodiment showing the guide portion being used in isolation or with other apparatus. When considering the use of the guide portion in isolation paragraph [0128] explains:

"While the above described examples show a guide portion 110 in use with a piling template, it will be appreciated that in further examples, that piling template need not be used. For example, in some embodiments of the guide apparatus 100, only a guide portion 110 may be used. In those examples, the guide portion 110 may be located on the seabed"

And further paragraph [0175] explains:

"In some examples, the anchor points 3100 may be configured or at least used to couple the apparatus 3000 to a water floor (e.g. sea bed)."



- 42. These two passages teach the skilled person that when no template is used with the guiding apparatus, the guide portion may extend to the seabed and may be attached thereto using anchor points.
- 43. The independent claims define a guide apparatus for an offshore pile. The purpose of the apparatus is to guide a pile into position either in a piling template or directly on the seabed for hammering into position within the seabed. Further, the aim of the guide apparatus is to provide improved noise insulation of the template known from EP 2402511 A1. In order to provide such a guide apparatus with improved noise insulation, in my opinion, the skilled person would consider it necessary for the guide portion to extend from the surface of the water to the seabed as argued by the observer. If the guide portion does not extend in this way, I cannot see how improved noise reduction over the prior art can be achieved. Further, the guide portion must provide a guiding function for guiding the pile into position in the template or seabed (if used in isolation).
- 44. Whilst I do not consider recourse to EP 2402511 A1 is necessary to properly construe the feature of a guide portion, as discussed above, I consider the skilled person is taught by EP 2402511 A1 that the sleeves 11A provide a guiding function for a pile and that the sleeves preferably extend from the template base to protrude

- from the surface of the water. The teaching of EP 2402511 A1 would appear to support my construction of the guide portion above.
- 45. I have no issue with the remaining claims and consider them to be clear when read in light of the description and drawings. I am unable to identify anything in the patent that would justify deviating from a normal interpretation of the language used in the claim. In my opinion the skilled person would have no issue with understanding the meaning of the claims.

Infringement - the law

- 46. Section 60 Patents Act 1977 governs what constitutes infringement of a patent:
 - (1) Subject to the provision of this section, a person infringes a patent for an invention if, but only if, while the patent is in force, he does any of the following things in the United Kingdom in relation to the invention without the consent of the proprietor of the patent, that is to say
 - (a) where the invention is a product, he makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise:
 - (b) where the invention is a process, he uses the process or he offers it for use in the United Kingdom when he knows, or it is obvious to a reasonable person in the circumstances, that its use there without the consent of the proprietor would be an infringement of the patent;
 - (c) where the invention is a process, he disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.
 - (2) Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.
- 47. In *Actavis v Eli Lilly*³, Lord Neuberger states that the problem of infringement is best approached by addressing two issues, each of which is to be considered through the eyes of the notional addressee of the patent in suit, i.e. the person skilled in the relevant art. Those issues are:
 - (i) does the variant infringe any of the claims as a matter of normal interpretation; and, if not,

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³ Actavis UK Limited and Others v Eli Lilly and Company [2017] UKSC 48

- (ii) does the variant nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial?
- 48. If the answer is "yes" to either question, there is infringement; otherwise there is not.
- 49. The second issue to be addressed is whether the variant provided by the product varies in a way that is immaterial. The court in *Actavis* provided a reformulation of the three questions in *Improver* ⁴ to provide guidelines or helpful assistance in connection with this second issue. These reformulated questions are:
 - (i) Notwithstanding that it is not within the literal meaning of the relevant claim(s) of the patent, does the variant achieve substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?
 - (ii) Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing that the variant achieves substantially the same result as the invention, that it does so in substantially the same way as the invention?
 - (iii) Would such a reader of the patent have concluded that the patentee nonetheless intended that strict compliance with the literal meaning of the relevant claims(s) of the patent was an essential requirement of the invention?
- 50. To establish infringement in a case where there is not literal infringement, a patentee would have to establish that the answer to the first two questions was "yes" and that the answer to the third question was "no".
- 51. The first step in determining if there is any infringement under section 60(1) is to consider whether the product falls within the scope of the claims of the patent.

The product

52. The SubSea Quieter ("the SSQ Product") is an underwater noise mitigation system and is used in a method of underwater noise mitigation ("the SSQ Method"). The requester highlights two types of SSQ Product and SSQ Method – SSQ Pile Driving for Offshore Jacket and SSQ Pile Driving for Offshore Monopile. I will discuss the features of these two types of SSQ Product and SSQ Method using screenshots taken from the video on the observer's website referenced by the requester in their submission – https://greenov.green/solutions/subsea-quieter/#. Some of the screenshots have also been provided by the requester in Annex E.

SSQ Pile Driving for Offshore Jacket

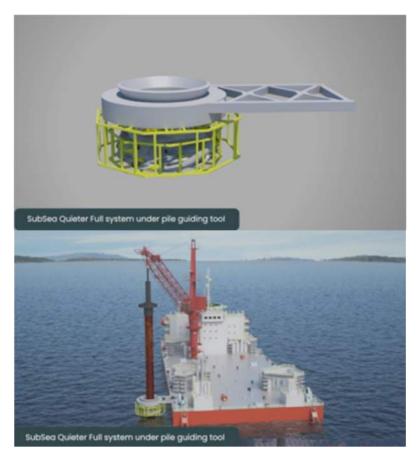
53. The screenshot below shows a pile driving vessel having a pile guiding bracket (shown in grey) for guiding the pile to the seabed.

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⁴ Improver [1990] FSR 181



54. The SSQ Pile Driving for Offshore Jacket is used to reduce underwater noise from pile driving operations with a jacket template. As shown in the screenshots below, the SSQ product is fixed under a pile guiding tool and is deployed with winches around the piles. Once the noise abatement system is deployed and inflated, the driving operation can take place. The SSQ product is located in a basket (shown in yellow) which is mounted under the pile guiding tool. The pile guiding tool is located above the level of the water. The observer has explained that the inflatable membrane used in the SSQ product is of the drop-stitch type.



55. The process of positioning a pile on the seabed and deploying the SSQ product into place before driving the pile into position in the seabed is shown in the screenshots below. As can be seen the pile is passed through the pile guiding tool with the SSQ product mounted under the pile guiding tool in an undeployed state. The deployment

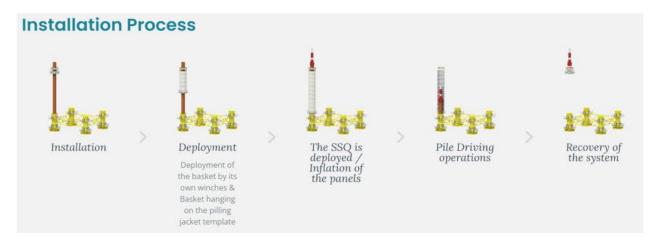
of the SSQ product is commenced after the pile has passed through the pile guiding tool and SSQ product. The SSQ product is fully deployed and positioned on the template after the pile has been positioned in the template. After full deployment the SSQ product is inflated to provide the noise-reducing system. After the pile has been fully driven into position in the seabed the SSQ product is deflated and winched back into position under the pile guiding tool.







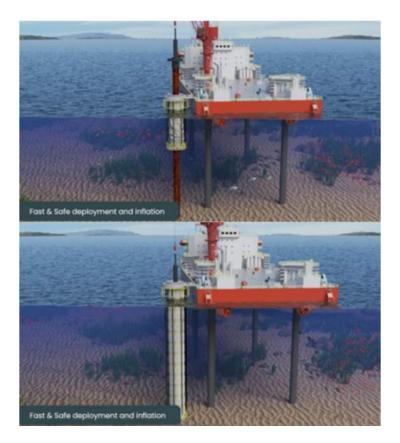
56. Below is a flow diagram of the installation process for the SSQ Pile Driving for Offshore Jacket taken from the observer's website.



SSQ Pile Driving for Offshore Monopile

57. The SSQ Pile Driving for Offshore Monopile is substantially the same as the SSQ Pile Driving for Offshore Jacket apart from that no template is used on the seabed with the pile instead placed directly on the seabed. The screenshots below show the SSQ Pile Driving for Offshore Monopile using the system fixed under the pile guiding tool. As with the SSQ Pile Driving for Offshore Jacket, the observer has explained that the inflatable membrane used in the SSQ product is of the drop-stitch type. The SSQ Pile Driving for Offshore Monopile is also shown in the installation flow diagram below as being used with a gripper rather than the pile guiding tool.





58. Below is a flow diagram of the installation process for the SSQ Pile Driving for Offshore Monopile taken from the observer's website.

Installation Process



Does the SSQ product infringe the patent as a matter of normal interpretation?

59. I will now consider whether the product falls within the scope of independents claim 1 and 13.

- 60. As discussed above the main feature of contention is whether the SSQ product includes a guide portion within the scope of the independent claims. The requester argues that the template and/or the pile guiding tool can be considered a guide portion as required by the independent claims and thus when combined in use with either the SSQ Offshore Jacket or SSQ Monopile forms a guide apparatus falling within the scope of the independent claims.
- 61. The observers argue that they only intend to supply the SSQ product for use with existing templates and/or pile guiding tool. They do not intend to supply the template or pile guiding tool. They argue that in both the SSQ Offshore Jacket and SSQ Monopile it is the pile installed beforehand that guides the deployment of the membrane panels which form a sleeve over the pile and not the SSQ product which guides the pile as it is far too flexible and not very strong. The observer contends that the SSQ Offshore Jacket and SSQ Monopile are not guide apparatus within the meaning of claims 1 and 13 but rather a device providing an acoustic barrier around the pile. Therefore, they consider the SSQ Offshore Jacket and SSQ Monopile to not reproduce the features of 1.A to 1.D and 13.D and 13.E and thus not infringe the patent.
- 62. The requester has explained that the fact the observer has stated they only supply the SSQ product and not either the template or pile guiding tool is irrelevant as the question being asked is whether the combination of the SSQ Offshore Jacket and the piling template or the combination of the SSQ Monopile and the piling template and/or the pile guiding tool falls within the scope of the independent claims. The requester considers the supply of the SSQ Offshore Jacket and/or SSQ Monopile to be contributory infringement under section 60(2).
- 63. Whilst the inflatable membrane of the SSQ product is of the drop-stitch type, for the reasons discussed above in paragraphs 33-42 I do not consider the SSQ product to include a guide portion that falls within the scope of the independent claims of the patent. In my opinion, whilst the SSQ product does comprise a sound-insulating sleeve which provides an acoustic barrier between a pile and a surrounding body of water during deployment of a pile at a body of water; wherein the sound-insulating sleeve comprises one or more segments which include an inner fabric material which is of drop-stitch type, in my view as explained above I do not consider the SSQ product to include a guide portion which provides a guiding function for a pile during positioning on either a template or the seabed. The observer has explained that the sound-insulating sleeve is too flexible and of insufficient strength to guide a pile. Furthermore, as shown in the installation process for both the SSQ Offshore Jacket and SSQ Monopile, the pile is positioned on the template or seabed before the sound-insulating sleeve is deployed. Therefore, the sound-insulating sleeve does not provide any guiding function for the pile. I consider the guide portion to be required to provide a guiding function for a pile in order to fall within the scope of the independent claims.
- 64. In addition, as explained above I consider that the skilled person would understand the template to be a separate part of a guiding apparatus to the guide portion. As such, in my opinion a piling template cannot be considered a guide portion within the meaning of the independent claims.
- 65. Notwithstanding this, in my view neither the template nor pile guiding tool can be

considered a guide portion falling within the scope of the independent claims as whilst they both provide a guiding function for a pile neither includes a dampening structure configured to provide the acoustic barrier between a pile and a surrounding body of water during deployment of a pile at a body of water. Furthermore, neither the template nor pile guiding tool comprise an inner fabric material which is of drop-stitch type.

- 66. Therefore, it is my opinion that the combination of the SSQ Offshore Jacket and the piling template or the combination of the SSQ Monopile and the piling template and/or the pile guiding tool does not fall within the scope of claims 1 and 13 of the patent as a matter of normal interpretation. As the answer to the first Actavis question is 'no', it is necessary for me to consider the second Actavis question in relation to claims 1 and 13.
- 67. Does the combination of the SSQ Offshore Jacket and the piling template or the combination of the SSQ Monopile and the piling template and/or the pile guiding tool nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial? Turning to the Improver questions for assistance it is necessary to consider the inventive concept revealed by the patent. The aim of the invention as set out in paragraph [0013] of the patent is to improve of noise insulation of the known template from EP 2402511 A1. This is achieved in the patent by the guide apparatus comprising a guide portion configured to provide an acoustic barrier between a pile and a surrounding body of water during deployment of a pile at a body of water, wherein the guide portion comprises a dampening structure having an inner fabric material which is of drop-stitch type.
- 68. In my opinion, the inventive concept lies in the guide portion comprising a dampening structure having an inner fabric material which is of drop-stitch type to provide the acoustic barrier. However, the SSQ product in combination with a piling template and/or a pile guiding tool does not achieve the same result in the same way as it does not have a guide portion which provides the acoustic barrier and a guiding function to a pile. Therefore, it is my opinion that the SSQ product in combination with a piling template and/or a pile guiding tool cannot be said to vary in a way that is immaterial.

Contributory infringement

- 69. As mentioned above the requester has also raised the question of whether the supply of the SSQ Offshore Jacket and/or SSQ Monopile constitutes contributory infringement under section 60(2).
- 70. Under section 60(2) a person may infringe if, without consent, they supply or offer to supply in the UK a person not entitled to work the invention with means relating to an essential element of an invention for putting the invention into effect in the UK.
- 71. As in my opinion the SSQ product in combination with a piling template and/or a pile guiding tool does not infringe the patent as a matter of normal infringement, and the SSQ product does not provide a guide portion falling within the scope of the independent claims, the SSQ product cannot be considered an essential element of the invention for putting the invention into effect.

Opinion

- 72. It is my opinion that the SSQ product in combination with a piling template and/or a pile guiding tool does not fall within the scope of claims 1-15 of the patent as a matter of normal interpretation. Further, it is my opinion that the SSQ product in combination with a piling template and/or a pile guiding tool does not vary from the features of these claims in an immaterial way. Accordingly, it is my opinion that the SSQ product in combination with a piling template and/or a pile guiding tool does not infringe EP 2834423 B1 under Section 60(1) of the Act.
- 73. It is also my opinion that the supply of the SSQ Offshore Jacket and/or SSQ Monopile does not infringe EP 2834423 B1 under Section 60(2) of the Act.

Application for review

74. 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.

Marc Collins		
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.