Intellectual Property Office

BL O/437/13

14th November 2013

PATENTS ACT 1977

BETWEEN

Enviroform Solutions Limited	Claimant
And	
Mr Glenn Melvin	Defendant

PROCEEDINGS

Application under section 72 of the Patents Act 1977
for revocation of patent number GB 2479023

HEARING OFFICER Phil Thorpe

Hearing date: 4 September 2013

DECISION

Introduction

1 This decision relates to an application under section 72 of the Patents Act 1977 by Enviroform Solutions Limited for the revocation of UK patent GB 2479023.

2 Enviroform claims that that the invention is not patentable, that the specification does not disclose the invention clearly and completely enough for it to be performed by a person skilled in the art and that matter disclosed in the specification of the patent extends beyond that disclosed in the application for a patent as filed.

3 The application under section 72 was initially filed on 16th May 2012 though due to the need to correct the statement of case it was not until 7th June that it was served on the defendant. The defendant filed its counterstatement on 17th July 2013 and at the same time sought amendment of the patent under section 75. The IPO sought to inform the claimant of the section 75 amendments however the letter doing this was wrongly addressed. The filing of the section 75 was however reported in the online journal. The counter statement also referred extensively to the amendments filed under section 75. The claimant was invited to file a revised statement which it did on 7th January 2013. In response an amended counter-statement was filed on 22nd March 2013.

4 The claimant provided one witness statement from Mr Liam Brown, the Managing Director of Enviroform Solutions. The defendant also provided a witness statement.

5 Shortly before the hearing, both sides helpfully provided skeleton arguments. The claimant's skeleton argument noted that it had only recently received a copy of the amendments filed under section 75 however its skeleton argument had addressed the section 75 amendments. I did however convene a brief case management conference by phone on 3rd September 2013 to confirm that both sides were content to go ahead with the hearing and that the issues in question were clear to both sides.

6 The case subsequently came before me at a hearing on 5th September 2013 at which the claimant was represented by Mr Stephen Waller from patent attorneys FRKelly and the patent proprietor, Mr Glenn Melvin, was represented by Mr James Whyte of Counsel instructed by Bailey Walsh & Co. There was no cross examination of either Mr Brown or Mr Melvin.

Preliminary Issues

7 Mr Whyte questioned whether the issue of inventive step that the claimant was seeking to argue had been properly pleaded. Notwithstanding that the main focus of the claimant's arguments had at the beginning, and also subsequent to the section 75 amendments been focussed on novelty, the possibility that the claims may also lack an inventive step was raised in particular in paragraphs 8 and 14 of the amended statement of case. On that basis I am satisfied that the issue of whether the claimed invention involves an inventive step over the prior art identified by the claimant is a matter that I must consider.

The law

8 The reference was brought under section 72 which reads so far as is relevant as:

> 72.-(1) Subject to the following provisions of this Act, the court or the comptroller may by order revoke a patent for an invention on the application of any person (including the proprietor of the patent) on (but only on) any of the following grounds, that is to say -
>
> > (a) the invention is not a patentable invention;
> > ...
> > (c) the specification of the patent does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art;
> > ...
> > (d) the matter disclosed in the specification of the patent extends beyond that disclosed in the application for the patent, as filed,

9 An invention is patentable if it meets the conditions set out in section 1(1) which reads so far as is relevant:

> 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;

Sections 2 and 3 go on to 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; the state of the art 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.

10 Although Mr Waller did not explicitly apply it to his challenges on inventive step, the test to be followed in determining whether an invention involves an inventive step is of course that set out by the Court of Appeal in *Windsurfing*[1] as modified in *Pozzoli*[2]. The *Pozzoli* test comprises the following steps:

> 1. (a) Identify the notional "person skilled in the art"
> (b) Identify the relevant common general knowledge of that person;
>
> 2. Identify the inventive concept of the claim in question or if that cannot readily be 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 which would have been obvious to the person skilled in the art or do they require any degree of invention.

The patent

11 GB 2479023, entitled after amendment "A Pre-Fabricated External Building Construction Panel and Method of Use Thereof", was granted on 11th April 2012 with a priority date of 14th June 2010. It relates to a construction panel providing insulating properties especially to the external surfaces of a construction. According to the patent outer coatings on buildings have conventionally been applied by applying render or paint to the external surface of the building however this can only be undertaken successfully when weather conditions are dry. This can cause delays in completion of building projects during periods of wet weather and can increase the cost of the building project. The render is normally applied to a support wire system that is attached to the external surface of the building, which increases the cost and the number of steps involved in the procedure. The process is therefore labour intensive and time consuming. As an alternative to render or plaster, it is known to provide external surfaces of building with an external cladding, such as stone or metal cladding, which has a waterproof outer coating. This type of cladding typically includes a plastic or metal material which may limit the aesthetic effect provided by the external appearance of the building and is also expensive to produce.

12 The invention set out in the patent seeks to overcome these disadvantages. A single embodiment of the invention is described with reference to figures 1 to 3 reproduced below. These show a dry lining construction panel 2 having outer and inner surfaces 3 and 5 respectively. A first inner insulating panel 4 is formed from polyurethane. An intermediate layer 6 is formed from calcium or magnesium silicate board. The board 2 is shown with narrowing tapered edges 8 and a third outer layer 20 such as

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[1] Windsurfing International Inc v Tabur Marine (Great Britain) Ltd [1985] RPC 59
[2] Pozzoli SPA v BDMO SA [2007] EWCA Civ 588 [2007] All ER (D) 275 (JUN)

masonry paint which may be applied once the panel is fixed in place. Panels 2, 2' are shown secured with screws to rails 12 fixed to the external surface of a building 10, scrim tape 18 being applied over abutting edges 8.

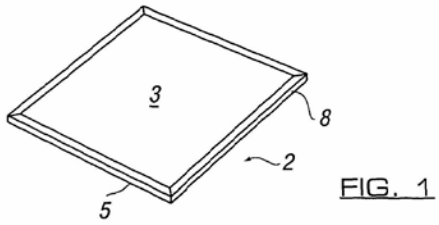

FIG. 1

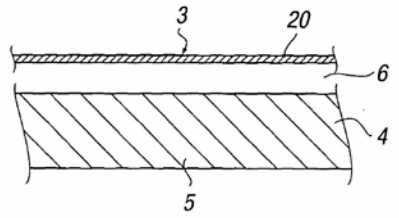

FIG. 2

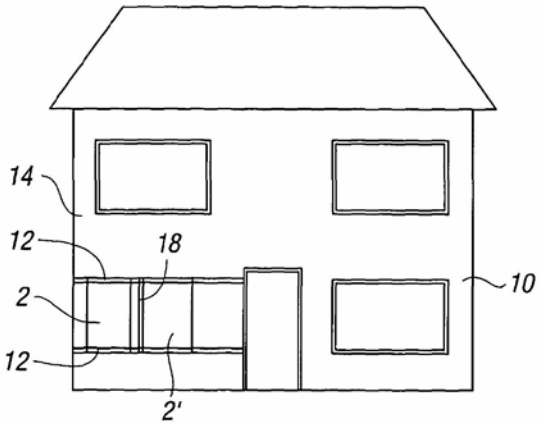

FIG. 3

13 The patent as granted has 20 claims with independent claims 1 and 18 relating to the panel and a method of applying the panel. Claim 1 of the patent as granted reads as follows:

> A pre-fabricated building construction panel for use on an external surface and/or part of a building or construction, said panel including a first layer formed, at least in part, from a material having one or more insulating properties, and at least a second layer joined or applied to said first layer, said at least second layer formed from or includes a water resistant or water repellent material in the form of a particle board, and wherein mesh support means are located in or between one or more layers of the panel.

14 As noted the defendant submitted, unconditionally, further amendments to the claims under section 75. The amended claim 1, with the amendments highlighted, reads as follows:

> A pre-fabricated *external* building construction panel for use on an external surface and/or part of a building ~~or construction~~, said panel including a first layer formed, at least in part, from a material having one or more insulating properties, and at least a second layer ~~joined or applied~~ *laminated* to said first layer, *said first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool*, said at least second layer formed from or includes a water resistant or water repellent material in the form of a particle board, and wherein mesh support means are located in or between one or more layers of the panel.

There is a further independent claim, claim 16 directed to a method of using the panel defined in claim 1 which includes the step of attaching the panel to an external surface or part of a building.

15 This decision is based on the amended claims filed under section 75.

16 I would add that the patentee and defendant Mr Melvin provided a witness statement which explained that the invention at issue here has won one, and has been short-listed for another, industry based innovation award. Mr Melvin suggests that this demonstrates recognition from industry leaders of the innovativeness of his invention. For reasons that will become apparent nothing really turns on this evidence.

Enabling disclosure and added matter

17 Since the embodiment described in the specification makes no mention of mesh support means, the claimant has argued that there is no enabling disclosure for the mesh support means of claim 1. The defendant's position is that such means can be readily implemented using common general knowledge. Although no evidence is provided to show that mesh support means are commonly known I am inclined to agree with the defendant. Whilst not conclusive, the presence of such mesh support means in the prior art serves to strengthen this opinion.

18 The claimant has also argued that there is no basis in the application as filed for the mesh support means of claim 1. It refers to part of claim 15 as filed that reads "a mesh or support material" and to a passage at line 22 to 25 on page 4 as filed that reads "In one embodiment a mesh, support means or similar support material can be located in or between one or more of the layers of the panel.". The defendant's argument is that support means is implicit in mesh. When read in the context of the specification I am inclined to agree that there is in fact basis for the mesh support means of claim 1.

19 I turn now to the construction of the amended claims and whether the invention as claimed is novel and inventive having regard to the prior art identified by the claimant.

Claim construction

20 In considering the application for revocation I will need to construe the claims of the patent following the well known authority on claim construction which is *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others* [2005] RPC 9. This requires that I put a purposive construction on the claims, interpret it in the light of the description and drawings as instructed by Section 125(1) and take account of the Protocol to Article 69 of the EPC. Section 125(1) of the Act states that:

> 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.

21 And the Protocol on the Interpretation of Article 69 of the EPC (which corresponds to section 125(1)) states that:

> Article 69 should not be interpreted in the sense 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. Neither should it be interpreted in the sense 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 patentee has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties.

22 Simply put, I must decide what a person skilled in the art would have understood the patentee to have used the language of the claim to mean. The amended claims are relatively clear in scope. There is though a number of phrases on which the parties were not able to agree as to how they should be construed.

Pre-fabricated external building construction panel

23 It seems to be common ground that the term *pre-fabricated* refers to the panel being formed prior to use. The defendant however suggests that the pre-fabrication stage should in addition be conducted off-site as well as prior to use. This is resisted by the claimant. On this point I am with the claimant. I believe that the skilled person reading the patent would understand that what is required is a panel that is fabricated prior to it being affixed to the building. That pre-fabrication would most likely be undertaken off site but the patent does not exclude it being done on site.

24 The claimant suggests that the amendment to add the term *external* to the introduction of the claim does not materially affect the scope of the claim as the panel was already described as being suitable for use on an external surface of a structure. Conventionally “for use” is construed as “suitable for use” in a patent claim. Beyond that, the question arises whether the panel could be suitable for use as an external surface and/or part of a building. It seems clear from the patent that the invention is for dry-lining a building by applying the panels to the external surface of that building. There seems to be no indication in the patent that the panels might be used as structural panels in their own right.

Building

25 Since some of the evidence provided by the claimant relates to park homes, arguments from the defendant consider the construction that should be placed upon the term *building*. Having deleted the alternative “*or construction*” from claim 1 with the recent amendments, the defendant suggests that the term building should be construed narrowly and does not relate to any form of construction. To illustrate the point several documents are provided showing that the term *park home* has a particular meaning and refers to a mobile home or caravan rather than a building. These documents include a planning appeal decision and a Government consultation paper concerned with amending the legal definition of a caravan in the context of the Caravan Sites and Control of Development Act 1960. By contrast the claimant suggests that such a narrow construction is not appropriate and that legal definitions used in planning law are not pertinent to the technical field of the

invention. I have more sympathy with the position of the claimant than the defendant on this point. It seems to me that the person skilled in the art would not necessarily be conversant with legal definitions used in planning law and would not therefore construe a term along those lines. I also have some difficulty in that the defendant argues what the term building should be construed not to mean rather than what it should be construed to mean. To my mind the skilled person would understand the term building in this context to include a structure, most likely a fixed structure to which it is desirable to fix external panels for reasons of water proofing or resistance or to improve to improve the insulation properties of a building. I see no reason why such a building would not include a park home. I would add that even if I am wrong on this and that a park home would not be considered as a building in the context of how that term is used in the patent, then I would still be of the opinion that a panel shown as suitable for use on a park home would also be suitable for use on a building and as such within the scope of the claim.

Particle board and *Laminated to*

The claimant and defendant differ on what the skilled person would understand the patentee to have been using the phrases "*in the form* of a *particle board"* and "*laminated to"* to mean. The amended claim states that the second layer is "*formed from or includes a water resistant or water repellent material in the form of a particle board..*". The dependent claims go on to state that the particle board is a cement based particulate material, such as cement particle board or more specifically a calcium or magnesium silicate board. The description casts little further light on the intended meaning of this phrase and provides little on how the overall panel is intended to be constructed.

26 The defendant suggests that *particle board* means a pre-formed board formed of particulate material. It bases this amongst other things upon definitions in the Concise Oxford dictionary and the existence of, but not the contents of, various British Standards documents that refer to particle board. It seeks to contrast this with a layer which is poured and allowed to set. In contrast the claimant suggests that the scope of this phrase is broad enough to cover just such a wet poured layer.

27 I am satisfied that the phrase particle board is a recognised term in the building industry that is used to describe a range of boards formed from particulate material. This could be woodchip in for example chipboard. Cement based particle boards are also known in the industry. It is likely that the panel set out in the patent would be fabricated from a pre-formed calcium or magnesium silicate board or panel. They may indeed be benefits from using a standard board. However the claim is not directed at the method of manufacturing the panel but rather at the product that is the panel. I fail to see how a panel that is made up from a pre-formed particle board would be covered by the claim yet a panel that otherwise has the same characteristics but is not formed using a pre-formed particle board would not be covered. In other words what matters is whether a skilled person looking at the second layer in the finished product would associate that layer with a particle board even if it was not a pre-formed particle board to start with. If the skilled person is of the view that the second layer is in the form of a particle board then it would fall within the meaning of that part of the claim. I would add however that this aspect of the invention would be clearer if it was the subject of a method or process of manufacture claim rather than a product claim.

28 The defendant suggests that *laminated to* refers to fixing one formed layer to another formed layer, while the claimants believe that *laminated to* can also include the situation where layers are built up by forming one layer on or next to another. From the specification and the dictionary definition it seems to me that the skilled person would understand *"laminated to"* to mean one layer formed on or next to another, irrespective of whether those layers were formed prior to lamination. I come to this view since I have no evidence to convince me that the skilled person would understand laminated to have any additional limitation.

29 There is a further point. As I have already noted the claim is directed to the panel itself and not its method of manufacture. To the extent that the claim seeks to define any part of the panel by its manner of production then the claim would fall within the category of a product-by- process claim. Such claims are generally construed as a claim to the product as such[3]. I can see no reason why that would not be the case here. Hence stating that the two layers are laminated together imposes no particular limitation on the claim as the claim has already specified separate first and second layers.

Rockwool

30 The claimant suggests that Rockwool (RTM) should be construed to mean thermal insulation manufactured by Rockwool Limited. It seems from the defendant's counter statement that the term Rockwool can be found in the Oxford Concise Dictionary and consequently I agree with its conclusion that I should construe the term broadly, whilst not seeking to encourage the use of Trade Marks in a generic sense.

The prior art and prior disclosures

31 The claimant maintains that the invention of claims 1 to 8 and 16 is not patentable since it was obvious in light of what was known at the priority date, as shown by the evidence of a witness statement of Mr. Liam Brown and what was commonly known. In addition claim 1 is either not novel or lacks an inventive step when combined with what was common knowledge having regard to GB2268199, WO97/09495, WO2007029105, US2006/0254207, KR20000031214, CN101235670 and CN2727290.

32 I will deal in turn with the prior use and disclosure set out in the witness statement of Mr. Liam Brown and each of the patent documents referred to by the claimant.

Witness statement of Mr Brown

33 According to the claimant, the witness statement of Mr Brown provides evidence of the manufacture, sale and public use of exterior cladding panels having all the properties of the panels in the amended claim 1 with the exception that the insulating material is not one of those specified. However the claimant claims that the invention would nevertheless not involve an inventive step over what was disclosed.

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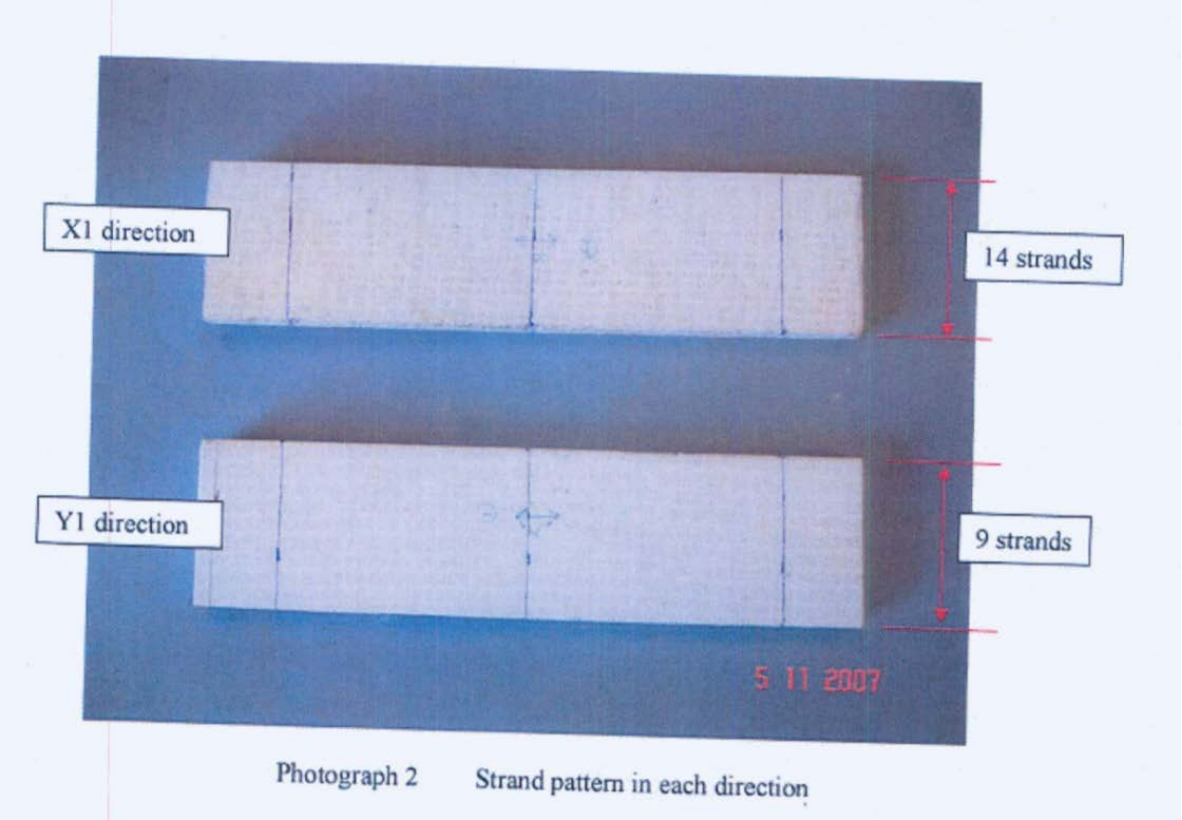
[3] *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd* [2005] RPC 9

The witness statement refers for support to a number of documents. These are labelled LB1-7.

34 More specifically the witness statement focuses on the activities of a company called Tradewood Agencies and others to whom this company supplied or provided their products. Mr Brown was an employee of Tradewood from August 2006 until April 2012 with responsibility for managing Resistant Building Products who distributed magnesium silicate boards.

35 In his witness statement Mr Brown asserts that Tradewood Agencies supplied magnesium silicate board laminated with an insulating material as an external cladding panel having improved thermal insulation since at least 2009. As a statement in isolation this does not seem to me to provide evidence that the invention of claim 1 is not novel or is obvious. The defendant has not questioned whether such boards provide a water resistant or water repellent material and I take it that they do. However, the witness statement itself does not provide evidence of the mesh support means or the particular insulation materials required by claim 1.

36 The witness statement however refers to a report of tests conducted by Queen's University Belfast on the flexural strength and elasticity of samples of magnesium silicate boards provided by Mr Brown. The report, which is dated 1st November 2007, is provided to show that the boards tested included mesh reinforcement in the form of glass fibre strands. The basis for this is said to be photograph 2 at the end of the report. The detail in the colour photograph, below, is not very distinct (and the black and white version is even less clear). However, it is clearly annotated "14 strands" and "9 strands" and the body of the report refers to the same number of strands crossing a fracture surface. The defendant has questioned the quality of the photograph and therefore what can be taken from it. However I am satisfied on the basis of what Mr Brown states in his witness statement and what is shown in the report that the boards being tested were magnesium silicate boards with mesh support means.



Photograph 2 Strand pattern in each direction

37 Mr Brown also states that the boards being tested in this test were samples of what were known as the "Multi-Pro" product. Whilst this is not confirmed by the report I am prepared to accept in the absence of any evidence to the contrary that the tested boards were Multi-Pro boards and that these boards did contain mesh support means.

38 Mr Brown goes on to state that Tradewood commissioned FGF Limited to bond phenolic foam onto 6 mm Multi-Pro Magnesium Silicate board and that such composite panels were installed as external cladding on a site in Belfast between April and June 2009, i.e. before the priority date of the patent. In support of this I am provided with a purchase or materials order and an invoice. The purchase order is addressed to FGF Birmingham. It has been amended in several places, it is dated either 7th, 20th or 27th November 2008 (manuscript amendments have to some extent obscured the date) and refers to bonding phenolic insulation to Multi-Pro boards. The invoice from FGF Limited is also rather indistinct. It is marked "copy" and seems to be dated 11 or 21st November 2009. It makes no reference to bonding, to phenolic foam insulation, to Multi-Pro or to magnesium silicate. There are two lines under product description. The first reads "Soffitliner 2400 x 1200 x 40mm/6mm" and the second reads "Materials as listed". The various reference numbers on the purchase order and invoice do not correspond to one another.

39 The defendant has raised the question of whether the witness statement, bending test report, purchase order and invoice all relate to the same product. It identifies a number of discrepancies between the various documents. These include differences in the value of the order in the purchase order and the price charged in the invoice. There is also a significant time delay between the two and an apparent difference in cited order numbers on these two documents. On balance I am not convinced that

these documents lend any significant support to Mr Brown's assertion that composite panels comprising a 6mm Multi-Pro Magnesium Silicate board to which 40mm phenolic foam was bonded and were then installed as external cladding on a site in Belfast in 2009. However that assertion was not really challenged by the defendant with its own evidence to the contrary or though any cross-examination of Mr Brown. I therefore accept Mr Brown's assertion.

40 But does this use anticipate or render obvious claim 1? On anticipation I can be brief. I will leave for the moment the issue of what was actually disclosed to the public through the manufacture and installation of this particular board. This is because the amended claim requires that the insulating layer "is or includes any or any combination of polyurethane, expanded polystyrene or rockwool" and this, as the claimant accepts, is not disclosed in the product produced by Tradewood and installed in Belfast. The claimant however asserts that the choice of insulation from a group of materials commonly used to thermally insulate walls amounts to a simple design choice and that therefore the Tradewood prior use demonstrates a lack of inventive step in claim 1.

41 The defendant questions whether such boards could provide a proper starting point to judge the inventive step provided by the patent, since their composition would not be apparent once installed. This seems to me to make a distinction between the panel itself that is described and shown in the bending test report, purchase order and invoice and processing of the panels by FGF Limited or the installation of such a panel on a site in Belfast. I draw a further distinction between whether the various actions were taken with or on the panels in public and whether the various persons undertaking those actions were free to divulge what they had seen of the panels subsequently. The panels tested by Queens University Belfast had no insulation layer and there is no argument from the claimant suggesting that both the provision of an insulation layer and the choice of the material of that layer would have been obvious. Therefore I shall not consider further the university tests. There is no evidence that actions performed by FGF Limited and on site in Belfast were performed in public, but nor is there anything to suggest that those present were prevented from subsequently divulging what they had seen, prevented for example by any duty of confidentiality. It seems to me therefore that the actions undertaken by FGF Limited and on site in Belfast during the installation of the panels were made available to the public. The question is therefore what those present at FGF Limited and in Belfast would have learned of the panels?

42 There is no evidence as to who might have been present at either location. It seems to me that in both cases those people were not likely to be unskilled observers, but more likely were conversant with the materials they were handling and that therefore they would realise that the panels in question included a layer of particle board and a layer of insulation. In the case of FGF Limited they would most likely have realised that the insulation was phenolic foam. I am not clear whether anyone present at FGF Limited would have realised that the particle board was necessarily water resistant or water repellent, but it seems likely that anyone installing such a panel as external cladding in Belfast would realise this. I have no evidence that the mesh would have been apparent. Therefore in terms of the *Windsurfing/Pozzoli* test, this makes both the inclusion of mesh support means and the choice of insulation the

differences between the matter cited as forming part of the "state of the art" and the inventive concept of the claim.

43 I have some sympathy with the claimants when they suggest that the particular choice of insulating material is not inventive. However, I have no evidence to suggest that the skilled person, who would for example be a person or team involved in the design or installation of building materials, would think the inclusion of mesh support means would have been obvious. Consequently I do not believe that the invention of claim 1 would have been obvious in light of the Tradewood prior use.

44 In the event that I am wrong that the proper starting point for judging obviousness is the activity at FGF Limited and on-site in Belfast, I should consider the differences between claim 1 and the panel as described and shown in the bending test report. As I have said above, the difference between the panel tested and that of claim 1 is the addition of the insulating layer and the choice of particular materials for that layer. I do not believe that adding an insulating layer and choosing any of the claimed material would have been obvious to a skilled person.

45 In yet another alternative the proper starting point could be the disclosure of the panels to the general public once installed in Belfast. Since only one face of the panels would be apparent to an observer, the differences between one face of an installed panel and claim 1 are significant. These include the mesh support means, the presence of an insulating layer and then the choice of insulating materials. I fail to see a convincing argument that all of these differences would be obvious to a skilled person.

46 Hence I am not convinced that the claims as amended are either anticipated or rendered obvious by the panels manufactured by FGF and installed in Belfast.

47 Mr Brown refers to a second possible disclosure of the invention involving panels, referred to as "InstaTherm" panels made by InstaFoam and Fibre Limited and installed on a number of park homes in 2009. I have already concluded above that park homes are buildings in the context of claim 1 and, even if they were not, that a panel fixed to such a structure would be suitable for fixing to a building. The witness statement does not describe the InstaTherm panels, but rather refers to a number of documents. These are a brochure from InstaFoam and Fibre Limited, a purchase order for artwork and printing, an invoice for artwork and printing and a report from Alba Building Sciences Limited on the thermal insulation performance before and after the installation of an InstaTherm insulation system. The brochure itself is marked "© InstaGroup September 2009" and Mr. Brown's statement states that it was issued to customers in September 2009. The purchase order is dated 11th August 2009, the invoice is dated 30th September 2009 and the report has a date of issue of November 2009. From the dates in the report it seems that the INSTA insulation system was installed between the 15th and 17th of October 2009. All of these dates are before the priority date of the patent. The invoice includes the same reference number as the purchase order, although it is only Mr. Brown's statement that links them to the brochure provided. Neither the purchase order nor the invoice provides any details of the InstaTherm product. The brochure describes the product as "a slim, breathable, layered insulation system which is fitted to the outside of your home." and it shows a section through the product with Magnesium silicate panels sandwiching a layer of Aerogel insulation. The brochure also includes a quote from

a customer whose park home had been fitted with InstaTherm panels. The Alba report names the panels as InstaTherm and describes them as comprising a 9mm Aerogel layer sandwiched between two 3mm thick outer layers. It seems that the brochure and the report relate to the same panels.

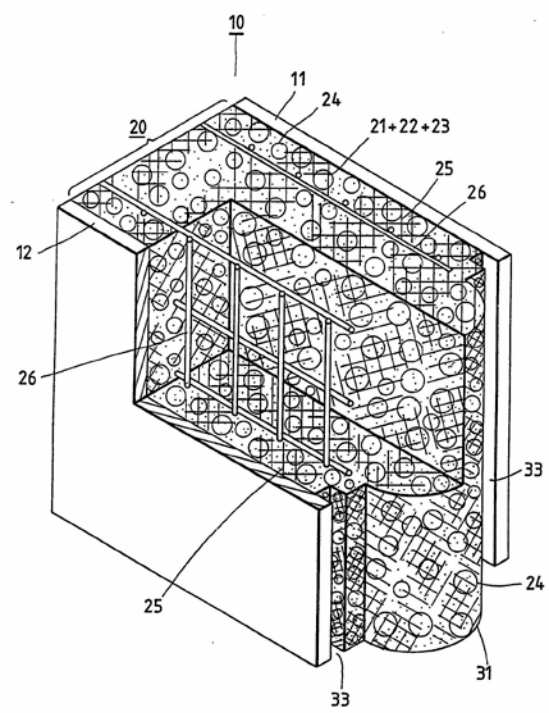
48 Although the defendant has queried if and when all of these documents were made public, it is the prior use of the InstaTherm panels rather than the documents that the claimant is seeking to base its arguments on. The brochure and the report each carry a date earlier than the priority date of the patent and, together with Mr. Brown's witness statement, they indicate that earlier than either of those dates InstaTherm panels had been installed on at least one park home. I am content that based on the evidence before me this was the case. It seems that the InstaTherm panels differ from the present invention in that there is no evidence of mesh support means and Aerogel is not one of the insulation materials listed in claim 1. As I said earlier I believe that substituting one common insulation material for another would have been obvious to a skilled man, but that providing mesh support means would not have been obvious to him.

49 However again there is the question of what was made public by these installations. Once the panels were installed there would be only one face visible, a face described in the Alba report as being covered with a textured polymer paint finish. So I fail to see how a skilled person could view the installed panels and arrive at the present invention from that starting point. There is no evidence that the persons preparing the Alba report were prevented from divulging what they knew of the InstaTherm panels which included that it they were each formed from a 9mm Aerogel layer sandwiched between two 3mm thick outer layers. There is no indication that the material of the outer layers or the mesh support means would have been apparent to Alba. It is not clear who installed the InstaTherm panels and whether they operated under any duty of confidentiality. Assuming there was no such duty, they would have been free to divulge what they understood of the panels. I believe that this would be much the same as Alba. It seems to me therefore that the present invention was not obvious in light of the InstaTherm prior use irrespective of what was made public by their installation.

The prior art as set out in various patent specifications

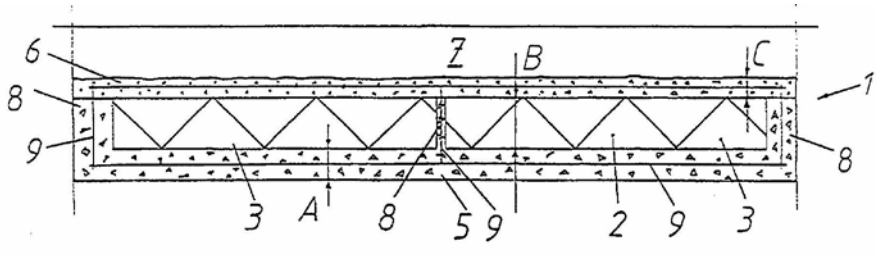
50 I turn now to the prior art set out in a number of patent specifications. In its initial statement of grounds the claimants suggested that seven patent documents anticipated claims from the patent. Subsequently the patent was amended and the amended statement of grounds states that "the claims are also lacking in inventive step over each of such prior art documents." I should therefore consider whether the claims of the patent are anticipated or obvious in light of each of the seven documents. All of the seven documents were published before the priority date of the patent.

51 With reference to the figure shown below, GB2268199 teaches a prefabricated construction panel comprising two fibre cement layers 11,12 sandwiching an intermediate layer made up of foamed granules 24 such as polystyrene mixed with cement, foaming agent and chemical adhesive with fibre filaments or metal networks such as meshed wire 26. The outer layers are said to provide waterproofing and the intermediate layer is said to provide sound insulation and thermal insulation.



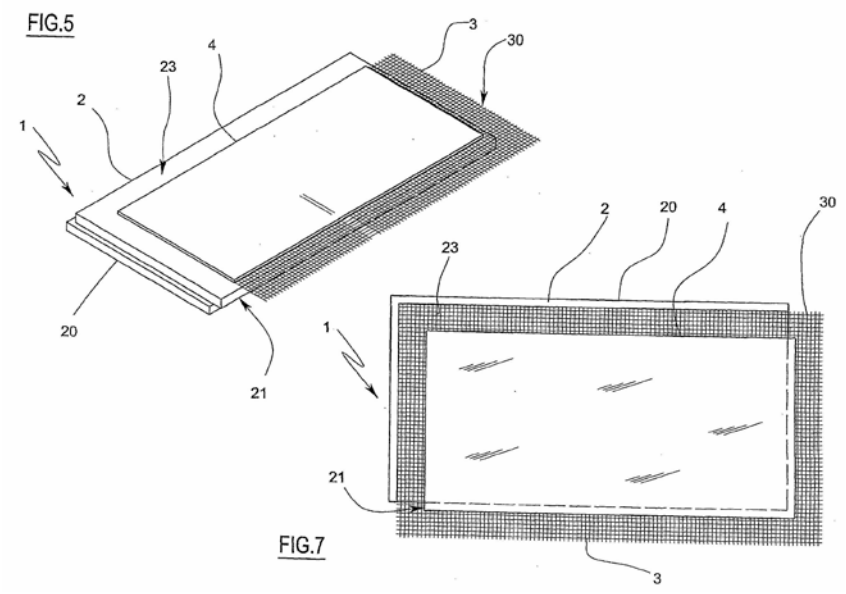
52 Although it is not explicitly brought out in the description, the drawings appear to teach the fibre cement layers as board like and hence these layers fall within the meaning of particle board as used in claim 1. Foamed polystyrene seems to me to be a form of expanded polystyrene. The panel is said to be formed by pouring the intermediate layer into the space between the fibre cement layers. The resulting product has layers laminated to one another as I have construed the requirement above. The panel in GB2268199 is clearly a structural element to be used in place of conventional construction techniques when constructing buildings. There is no mention of the panel being applied to the surface of a building. That leaves the question of whether it would be suitable for such use. I can see nothing in the disclosure that would suggest to a skilled reader that the panel might be suitable for use on an external surface of a building. Although the panel is described as light weight, this is by contrast with conventional construction techniques. Therefore I do not believe that GB2268199 anticipates claim 1 of the patent. I also do not believe that the invention set out in the amended claims is obvious in the light of this document

53 A prefabricated facade element for buildings is described in WO97/09495. This comprises a thermal insulation layer 3 of cellular plastic and a surface leaf 6 formed from light clinker material or concrete including an internal reinforcing mesh. The insulation is encapsulated between two leaves as they are cast and this seems to fall within the requirement to be laminated from claim 1 as I have construed it. However the light clinker casting is not a pre-formed particle board nor would it, I believe, be considered by the skilled person to be in the form of a particle board as required by claim 1. There are also further significant differences between claim 1 and what WO97/09495 discloses.



54 Cellular plastic insulation is not one of the materials from claim 1 and, whilst it is not entirely clear, it seems that the surface leaf is not formed from or includes water resistant or water repellent material. The references in WO97/09495 to water-tightness are to a plaster layer which is said to be applied on-site when the element is raised in position. It seems therefore that the prefabricated panel itself is not watertight. Thus WO97/09495 does not in my view anticipate claim 1. Substituting one insulating material for another I have already said would be obvious to a skilled person. However, I can see no reason for the skilled person to change the material of the surface leaf to be waterproof. Much like the panel shown in GB2268199, the facade element described in WO97/09495 is clearly a structural element rather than a dry lining or finishing panel. There is nothing in WO97/09495 to suggest that the element might be used in such a way. For these reasons I do not feel that claim 1 would be considered obvious in light of WO97/09495.

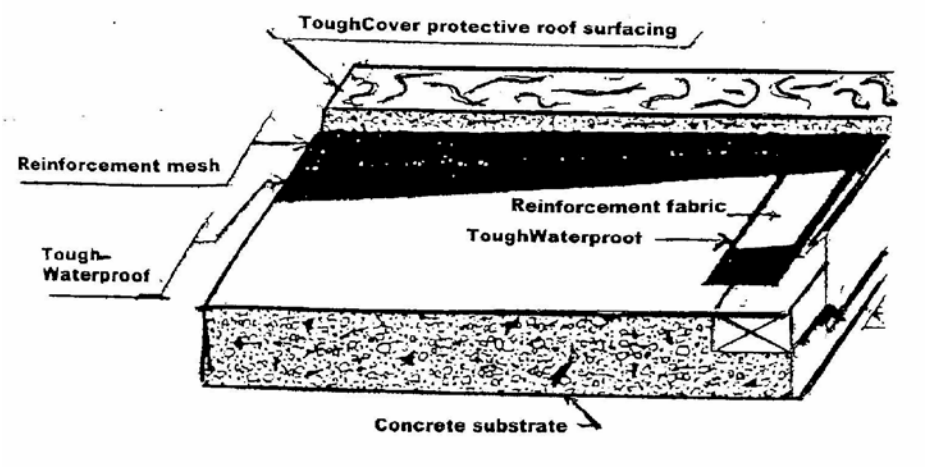
55 Unlike the previous documents WO2007/029105 does show a cladding system for use as an overcoat cladding on building structures. The system includes prefabricated panels each made up of a slab 2 of insulation such as polyurethane over which is laid a net and a layer of rendering which is spread and fixed to the slab.



56 The rendering may be Betonfix RS. Whilst WO2007/029105 gives no further details of Betonfix RS, the defendant has provided a description of the product from its manufacturer. This makes it clear that Betonfix RS is a cement product and a waterproof finishing mortar including “inert materials with maximum 0.5 mm granulometry”. As I have construed the term, the rendering is laminated to the slab.

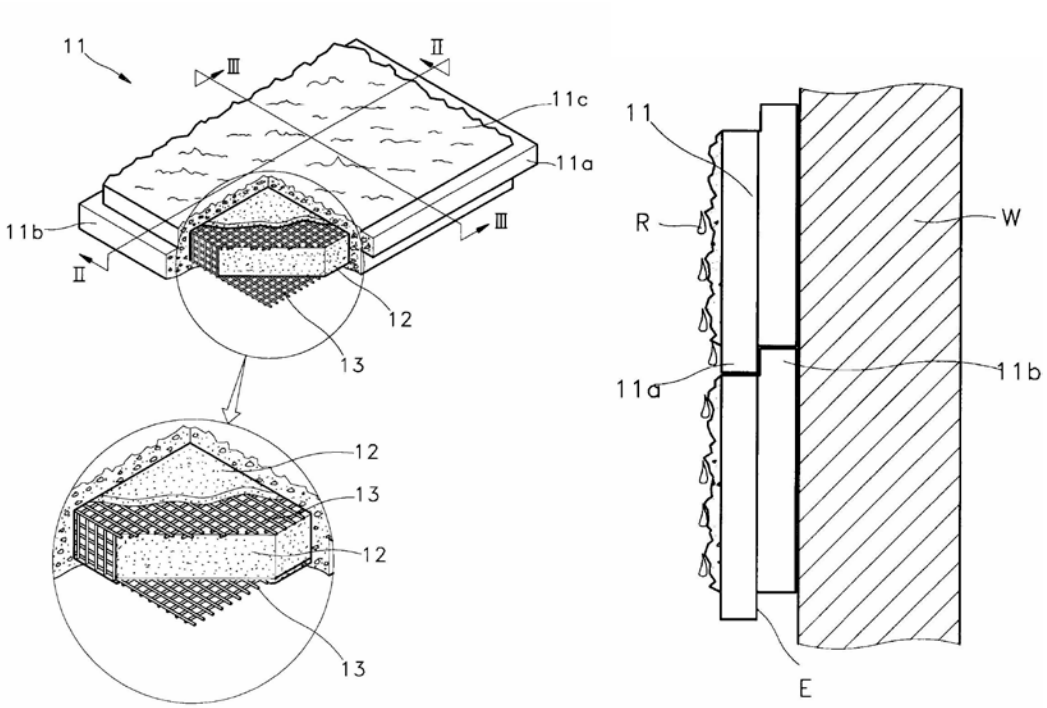
The rendering is however not in the form of a pre-formed particle board nor has the claimant in my opinion demonstrated that it would be considered as such by the skilled person. Rather what this document teaches is a wet applied render. Thus I believe that WO2007/029105 does not anticipate claim 1 of the patent. I also do not believe it would be obvious to modify the arrangement shown in this document to produce the invention set out in claim 1.

57 US2006/0254207 describes prefabricated tiles or shingles formed from a layer of expanded polystyrene (EPS) foam insulation board upon which is applied a layer of a rubber like waterproofing fluid and a layer of woven reinforcing mesh and finally over the waterproofing and mesh is brushed or rolled a layer that is “mainly a composition of cement, clay, perlite, sand, etc”.



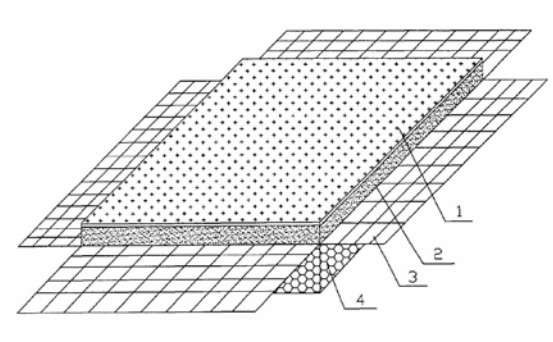
58 In the language of claim 1 this constitutes a prefabricated panel for use on an external surface of a building with a first layer of insulation in the form of expanded polystyrene laminated to a second layer and mesh support means. However, there is no indication that the second layer can repel or resist water nor that it is in the form of a particle board as I have construed that term. Indeed the presence of the separate waterproofing layer suggests that the layer in question is not water resistant or water repellent. This waterproof layer would also teach against making the second layer water resistant or water repellent. So I conclude that claim 1 is neither anticipated by US2006/0254207 nor would it be obvious in light of US2006/0254207.

59 KR2000-0031214 discloses a prefabricated panel 11 that is suitable for fixing to a wall W. The panel includes a heat insulating and filling material such as polystyrene or polyurethane foam 12 with mesh 13 reinforcing sandwiched between mesh 13 to which is attached an outer shell moulding 11a-c consisting of natural stone powder, cement and a waterproof material.



60 Whilst this document discloses many of the features of the claim it does not disclose nor suggest anything that would be considered as a second layer in the form of a particle board for the reasons already set out in respect of WO2007/029105.

61 CN101235670 describes a plate to be used on the external walls of buildings and which can be industrially produced. I take this to be a pre-fabricated external building construction panel. The panel is formed from a layer of insulation 4 bonded to a decorative finish 1, the two layers sandwiching a glass-fibre mesh 3 between them.



62 The decorative finish 1 is said in the abstract to be “formed by cement, silica sand, inorganic pigment powder, cement brighter powder, nano silicon ash and water reducing agent”. The screed 2 is made up of crack resistant mortar. This however is not a particle board as I have construed the term. In addition the decorative finish shown is formed from two layers, an outer decorative plaster layer and an anti-cracking plaster layer. It is the anti-cracking plaster layer that could be said to be laminated to the insulation. An automatic translation of CN101235670 provided by the Chinese Intellectual Property Office states that the insulation 4 can be “extruded polystyrene layer plates, rigid polyurethane foam sheet or EPS foam board”. The plate is also said to be “suitable to the weather changes, which has strong

weatherability". Whilst the plate has many of the features of the claim, there is on the basis of the material before me no disclosure or suggestion of a layer that is formed from or includes a water resistant or water repellent material in the form of a particle board as I have construed that requirement.

63 CN2727290 discloses a structural building material comprising a internal panel or plate, an internal concrete layer incorporating a steel mesh, a thermal insulation heat insulation layer, an external concrete layer incorporating a steel mesh and a waterproof cement mortar layer. This differs considerably from the amended claim not least in that it is not clearly a panel suitable for use on the external surface of a building. It also neither discloses nor suggests a layer formed from or which includes a water resistant or water repellent material in the form of a particle board.

Conclusion

64 Having carefully considered all the arguments put forward by the claimant, I have concluded that the patent as proposed to be amended is both novel and involves an inventive step having regard to the prior disclosures put forward by the claimant. I am also satisfied that the amended specification discloses the invention clearly and completely enough for it to be performed by a person skilled in the art and that matter disclosed in the amended specification of the patent does not extends beyond that disclosed in the application for a patent as filed. I therefore dismiss the application for revocation.

65 The unconditional amendments proposed by the defendant are governed by section 75 of the Act (having been proposed in the course of revocation proceedings before the Comptroller). Having reviewed the file it would appear that contrary to the impression given by the IPO in November 2012, the amendments proposed under section 75 were not formally advertised in the normal way in the official journal. The Register of Patents did however record at the time that amendments under section 75 had been requested and the amendments have been made available for public inspection since July 2012. I see no reason to advertise them further**. I therefore decide to allow the specification to be amended in the manner shown in the copy of the printed specification annexed to this decision.**

Costs

66 This appears, prima facia, to have been a relatively straightforward revocation action that was not without merit and which elicited unconditional amendment. The claimant however continued to pursue its case following the amendment and was ultimately unsuccessful. Hence a cost order against it would seem to be justified.

67 It is long-established practice that costs awarded in proceedings before the comptroller are guided by a standard published scale. The scale costs are not intended to compensate parties for the expense to which they may have been put, but merely represent a contribution to that expense. This reflects the fact that the comptroller ought to provide a tribunal which, as far as possible, has low and predictable levels of costs. Tribunal Practice Notice 4/2007[4] sets out the standard scale and explains how costs are to be determined. Subject to any convincing

[4] See www.ipo.gov.uk/p-tpn-42007

arguments to the contrary an award in accordance with the published scale would seem appropriate. Given the lightness of the evidence, the short duration of the hearing and that amendments were submitted, a cost award of the order of £800 to the defendant appears about right. **I will however allow the parties 2 weeks from the date of this decision to make further submissions solely on the issue of costs. If no submissions are filed then I will make an order consistent with my preliminary assessment above.**

Appeal

68 Any appeal must be lodged within 28 days

Phil Thorpe

Deputy Director Acting for the Comptroller

Annex 1

Proposed amendments under section 75 of the Patents Act 1977 as filed on 16th July 2012.

A Pre-fabricated External Building Construction Panel and Method of Use Thereof

The present invention relates to a pre-fabricated external building construction panel and a method of use thereof.

~~Although the following description refers almost exclusively to a construction panel for use on an external surface or part of a building, it will be appreciated by persons skilled in the art that the panel could be used on either an internal or an external surface on any construction, surface or building.~~

On construction of a building, it is desirable to provide the external surface of the building with a waterproof or water resistant outer coating, thereby preventing water ingress into the walls of the building over time and/or during adverse weather conditions. Conventionally this outer coating has been achieved by applying render or paint to the external surface of the building. An example of a known render procedure is Rendalath®. However, a problem with the application of render and/or paint is that this can only be undertaken successfully when weather conditions are dry. This can cause delays in completion of building projects during periods of wet weather and can increase the cost of the building project. The render is normally applied to a support wire system that is attached to the external surface of the building, which increases the cost and the number of steps involved in the procedure. The process is therefore labour intensive and time consuming.

As an alternative to render or plaster, it is known to provide external surfaces of building with an external cladding, such as stone or metal cladding, which has a waterproof outer coating. This type of cladding typically includes a plastic or metal

material which may limit the aesthetic effect provided by the external appearance of the building and is also expensive to produce.

It is therefore an aim of the present invention to provide a construction panel that overcomes the abovementioned problems.

It is a further aim of the present invention to provide a method of use of a construction panel that overcomes the abovementioned problems.

According to a first aspect of the present invention there is provided a pre-fabricated external building construction panel for use on an external surface and/or part of a building ~~or construction~~, said panel including a first layer formed, at least in part, from a material having one or more insulating properties and at least a second layer ~~joined or applied~~ laminated to said first layer, said first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool, said at least second layer formed from or includes a water resistant or water repellent material in the form of particle board, and wherein mesh support means are located in or between one or more layers of the panel.

Preferably the particle board is a cement based particulate material, such as cement particle board.

Preferably the cement based particulate material is a silicate containing material.

~~In one embodiment of the present invention there is provided a construction panel for use on an external surface and/or part of a building or construction, said panel including a first layer~~

~~formed, at least in part, from a material having one or more insulating properties and at least a second layer joined or applied thereto, said second layer formed from a silicate containing material.~~

The provision of the construction panel with the second silicate containing layer provides the panel with a certain degree of water resistance, thereby allowing the panel to be fitted to an external surface or part of a building ~~or construct~~ in any weather condition, such as in the rain, snow, high humidity conditions and/or the like. In addition, there is no requirement for application of a wet lining, such as render or plaster thereto. The simplicity of the panel and method of assembly of the panel to a suitable surface provides an 80% saving in labour.

The present invention therefore provides a dry lining technique for use ~~preferably~~ on the outside of an external surface of a building ~~or construction~~ but also for use on an internal surface of a building ~~or construction~~. The dry lining technique of the present invention differs from those used conventionally on internal surfaces, such as use of plasterboard panels, since plasterboard is formed from a single layer of gypsum or gypsum like material which absorbs moisture and/or water.

The panel of the present invention also has the advantage that it insulates the building ~~or construct~~, thereby reducing heat loss from the building and/or keeping the building cool. This helps to reduce costs associated with the building, such as heating and/or air conditioning and also reduces carbon emissions. In addition, the panel of the present invention is strong, impact resistant and robust, thereby providing rigidity and impact protection to the surface of the building ~~or construction~~.

The construction panel of the present invention can provide a direct replacement to render used on exterior facades of buildings ~~or constructions~~.

In a preferred embodiment the at least second layer forms an outer surface of the construction panel and faces outwardly from an external surface or part of the building ~~or construction~~ in use.

Preferably the first layer forms an inner surface of the construction panel and is typically arranged to be located facing, adjacent to, abutting with and/or joined to an existing external surface or part of the building ~~or construction~~ in use.

In one embodiment at least a third layer is applied to the outer surface of the second layer. The at least third layer is preferably formed from or includes a waterproof or water resistant material. In this embodiment the second layer forms an intermediate layer of the final construction panel.

Preferably the at least third layer forms an elastomeric outer coating on the panel. The at least third layer can include any or any combination of masonry paint, a textured coating, a suitable decorative effect and/or the like.

Preferably the first, second and/or at least third layer can be provided in substantially overlapping relationship. One layer may be applied to substantially the entire surface of an adjacent layer or to a part thereof.

~~In one embodiment a~~ The mesh, support means or similar support material can be located in or between one or more of the layers of the panel. ~~This can~~ helps to provide the panel with increased impact resistance and strength.

In one embodiment the construction panel including the first and second layers is pre-fabricated and is then fitted to an external surface or part of a building ~~or construction~~ in use. The at least third layer can be applied to the outer surface of the second layer once the construction panel has been fitted. In one example, the at least third layer can be applied to the outer surface of the second layer prior to the construction panel being fitted to a building ~~or construction~~.

~~Preferably the~~ The first and at least second layers are laminated together using a suitable lamination method or lamination means. Any known lamination method or means could be used.

~~In one embodiment the material of the first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool.~~

Preferably the first layer has a thickness of between 20-200mm. However, the thickness of the first layer is such so as to provide suitable insulation to the building ~~or construction~~ on which the panel is to be applied to in use.

In one embodiment the silicate containing material of the at least second layer is calcium silicate and/or magnesium silicate.

Preferably the at least second layer has a thickness of between 3-10mm.

In one embodiment the first layer is substantially of a greater thickness than the at least second layer.

Preferably the construction panel has one or more tapered peripheral edges. The tapered edges typically have a narrowing taper towards the free edge of the panel.

Preferably all the edges of the construction panel have a narrowing taper towards the free edges thereof.

In one example, adhesive and/or tape is located over the edges of two adjoining construction panels in use to join the same together. The edges of the panel are formed so as to allow a substantially flat, planar surface to be formed between the two adjoining panel edges on application of the adhesive and/or tape.

In one example, scrim tape or a suitable fibrous joining tape is used. The tape is located over the edges, and preferably tapered edges, of two adjoining boards and adheres or joins the same together. The third layer can be applied over the scrim tape or joining tape and the second layer if required.

The construction panel can be provided with attachment means for attaching the same directly or indirectly to an object or surface in use, such as an interior or external surface, substrate or part of a building ~~or construction~~ in use. The attachment means can include any or any combination of one or more screws, nuts and bolts, fixing rails, inter-engaging edges, members, adhesive, specialist adhesive and/or the like.

The construction panel can be of any suitable size and/or shape. In one example, the construction panel is substantially square or rectangular in shape.

One or more trims can be applied to the construction panel if required.

According to a second aspect of the present invention there is provided a method of using a pre-fabricated external building construction panel, said panel including a first layer formed, at least in part, from a material having one or more insulating properties, and at least a second layer ~~joined or applied~~ laminated to said first layer, said first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool, said at least second layer formed from or includes a water resistant or water repellent material in the form of particle board, and wherein mesh support means are located in or between one or more layers of the panel, said method including the step of attaching the construction panel to an external surface and/or part of a building ~~or construction~~.

The construction panel is typically fitted or retrofitted to an existing external or internal surface or part of an existing building ~~or construction~~. The surface of the building ~~or construct~~ to which the panel is to be fitted is prepared to ensure the surface is stable. For example, any debris and/or loose material on the existing surface is removed. The existing surface may be cleaned if required.

A rail system can be fixed to the existing surface of the building ~~or construct~~ using suitable fixing means. The rail system typically includes a plurality of rail member located at spaced apart intervals on the external surface. The construction panels can be fixed to or between the rail members in use.

The construction panels are typically located adjacent to each other in abutting relationship to form a substantially flat, planar surface. For example the panels can be aligned next to each other in an end to end and/or side to side configuration.

The panels can contact the existing surface of the building ~~or construct~~ and/or can be provided a spaced distance therefrom.

In one embodiment of the present invention there is provided a building ~~or construct~~ having external construction panels associated therewith.

In one embodiment of the present invention there is provided a dry lining method for an external surface of a building ~~or construction~~.

According to a further aspect of the present invention there is provided an exterior construction panel.

An embodiment of the present invention will now be described with reference to the accompanying figures, wherein:

Figure 1 shows a front perspective view of a construction panel according to the present invention;

Figure 2 is a cross sectional view taken through the panel shown in figure 1; and

Figure 3 is a simplified view of construction panels being applied to an external surface of a building.

Referring firstly to figures 1-2, there is illustrated a dry lining construction panel 2 for use as an external surface of an existing building or construction. The panel has an outer surface 3, an inner surface 5 and side walls or edges 8.

The construction panel 2 comprises a first inner insulating layer 4 formed from polyurethane. The second intermediate layer 6 is formed from calcium or magnesium silicate board. The second

intermediate layer 6 provides the panel 2 with a certain degree of water resistance, thereby allowing the panel to be applied to an external surface or part of a building in any weather condition to provide a water resistance layer to the building or surface. The board can be left on the external surface of the building until a suitable time when a further outer coating may be applied thereto.

First and second layers 4, 6 are laminated together by any suitable known lamination technique to form a pre-fabricated dual layer board. The first layer is typically thicker in dimensions than the second layer but the layers can be any suitable thickness as required. This dual layered board can then be transported to a suitable construction site for application to the surface of a building as and when required.

The panel 2 in the illustration is substantially square in shape and has narrowing tapered edges 8.

Although the following description refers to the construction panel being applied to an external surface of a building or construction, it will be readily understood that the panel could be applied to an internal surface of a building or construct if required. However, the significant advantages of the panel are realised when the panel is applied outside.

In use, the external surface of an existing building 10 is prepared by removing any loose material, such as render or plaster therefrom. A plurality of fixing rails 12 are fixed to the external surface 14 of building 10 using screws. The rails are located a spaced distance apart. This distance is such that a construction panel can be fitted between two adjacent rails.

Constructions panels 2, 2' are fitted side by side onto rails 12 using screws 16 so that the edges 8 thereof are in abutting relationship. Scrim tape 18 is then applied over the edges 8 of the two adjacent panels 2, 2' to join the same together and form a substantially flat, planar join.

Once the construction panels 2, 2' are fitted and joined together, a third outer layer 20 can be applied to the outer surface of layer 6 to provide a further water resistance coating and/or a suitable aesthetic finish to the construction panel. For example, the third layer can comprise masonry paint. It is not necessary to apply outer layer 20 immediately or at all to the surface of layer 6 to ensure some degree of water resistance is provided to the building.

The construction panel of the present invention provides a simpler means of providing a finishing surface to a building or construction which can be applied and used in any weather condition. In addition, the construction panel provides insulation to the external surface of the building or construction, thereby helping to save costs associated with heating and/or keeping the building or construct cool.

Claims

1. A pre-fabricated external building construction panel for use on an external surface and/or part of a building ~~or construction~~, said panel including a first layer formed, at least in part, from a material having one or more insulating properties, and at least a second layer ~~joined or applied~~ laminated to said first layer, said first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool, said at least second layer formed from or includes a water resistant or water repellent material in the form of a particle board, and wherein mesh support means are located in or between one or more layers of the panel.

2. A construction panel according to claim 1 wherein the particle board is a cement particle board including cement based particulate material.

3. A construction panel according to claim 2 wherein the cement based particulate material is a silicate containing material.

4. A construction panel according to claim 3 wherein the silicate containing material is calcium or magnesium silicate board.

~~5. A construction panel according to claim 1 wherein the first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool.~~

6. 5. A construction panel according to claim 1 where the first layer has a thickness of between 20-200mm.

7. 6. A construction panel according to claim 1 wherein the at least second layer has a thickness of between 3-10mm.

8. 7. A construction panel according to claim 1 wherein the first layer has a substantially greater thickness than the at least second layer.

9. 8. A construction panel according to claim 1 wherein the at least second layer forms an outer surface of the construction panel and faces outwardly from an external surface or part of the building ~~or construction~~ in use, the first layer forms an inner surface of the construction panel and faces inwardly, abuts with or is joined to the external surface or part of the building ~~or construction~~ in use.

10. 9. A construction panel according to claim 1 wherein a third layer is applied to ~~the~~ an outer surface of the second layer, the second layer therefore forming an intermediate layer in the final construction panel.

11. 10. A construction panel according to claim ~~10~~ 9 wherein the third layer is formed from or includes a waterproof or water resistant material.

12. 11. A construction panel according to claim ~~10~~ 9 wherein the third layer includes any or any combination of an elastomeric coating, masonry paint, textured coating or decorative coating.

13. 12. A construction panel according to any preceding claim wherein the first, second and/or at least third layers are provided in substantially overlapping relationship.

~~14. A construction panel according to claim 1 wherein the first and at least second layers are pre-fabricated via lamination means.~~

15. 13. A construction panel according to claim 1 wherein said panel has one or more tapered peripheral edges.

16. 14. A construction panel according to claim 1 wherein said panel includes one or more trims.

17. 15. A construction panel according to claim 1 wherein attachment means are provided to allow attachment of the panel to a surface or object in use.

18. 16. A method of using a pre-fabricated external building construction panel, said panel including a first layer formed, at least in part, from a material having one or more insulating properties, and at least a second layer ~~joined or applied~~ laminated to said first layer, said first layer is or includes any or any combination of polyurethane, expanded polystyrene or rockwool, said at least second layer formed from or includes a water resistant or water repellent material in the form of a particle board, and wherein mesh support means are located in or between one or more layers of the panel, said method including the step of attaching the construction panel to an external surface and/or part of a building ~~or construction~~.

19. 17. A method according to claim ~~18~~ 16 wherein adhesive and/or tape is located over the edges of two adjoining construction panels to join the same together.

20. 18. A method according to claim ~~19~~ 17 wherein the tape is scrim tape or fibrous tape.