Intellectual Property Office

BL O/0417/25

09 May 2025

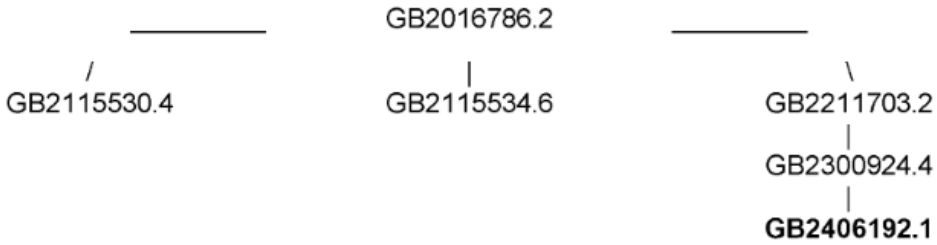
PATENTS ACT 1977

APPLICANT	Keyfix Limited
ISSUE	Whether a discretionary extension of the section 20 compliance period for GB2406192.1 should have been allowed, and whether GB2406192.1 complies with sections 1(1)(a), 1(1)(b) and 14(5)(b) of the Patent Act 1977
HEARING OFFICER	Barnaby Wright

DECISION

Background

1 Patent application GB2406192.1 was lodged 2nd May 2024. It is a third-generation divisional application, one of a number of applications divided from application GB2016976.2 (see diagram below). Due to its divisional status the application is treated as having a filing date of 22nd October 2020.



2 When lodged with the IPO, the section 20 compliance period had already expired (22nd April 2024) so a Patents Form 52 requesting an 'as of right' extension of the compliance period was filed in parallel. The compliance period was duly extended to 22nd June 2024.

3 On the 9th May 2024 a search report was issued, citing two 'A' documents as background art, alongside a letter stating that there were currently no objections and that the investigations under section 18(2) would be completed after publication.

4 A further Patents Form 52 was then filed by the applicant on the 25th June 2024 requesting a discretionary two month extension to the compliance period. The applicant explained the reason for the extension was to provide the applicant with

the opportunity to respond to and potentially amend the application following completion of the examiners investigations under section 18(2), and in doing so secure protection for the different inventions contained in their earliest application. This discretionary extension was allowed by the examiner, resulting in an extended compliance period of 22nd August 2024. The application was published as GB2626290 A on the 17th July 2024.

5 On the 9th August 2024 third party observations were filed which resulted in an examination report objecting to novelty, inventive step and clarity being issued on the 14th August 2024. As a result of objections arising from the third party observations, the compliance period was further extended by three months to the 13th November 2024.

6 On the 13th November 2024, the final day of the compliance period, the applicant filed amended claims and arguments as to why the amended claims were clear, novel and provided an inventive step. They also filed a Patents Form 52 requesting a further discretionary extension to the compliance period.

7 The examiner responded on the 4th December 2024, issuing a letter outlining issues relating to added matter, clarity, novelty, inventive step and conflict. The examiner also refused the request for a further discretionary extension to the compliance period. In particular, the examiner felt there was not an exceptional reason for such an extension. The examiner concluded that claim 1 was not clear and was not novel in light of the document cited in their previous exam report. They also concluded that the dependent claims were not novel or inventive.

8 Therefore, having declined to exercise discretion to allow a further two month extension of the compliance period, the examiner did not consider the application to comply with the requirements of the Patents Act 1977 ("the Act") at the end of the (extended) compliance period. As consequence of the examiner's communication, the outstanding issues came before me at a hearing on the 14th February 2024. Shortly before the hearing the applicant's attorney filed skeleton arguments, for which I am grateful. Five different proposed amendments to claim 1 were also submitted as part of the skeleton arguments, as well as an exhibit (NHBC 2025 standard 6.1) and a witness statement.

9 The applicant was represented at the hearing by attorney Mr John Hanna of Hanna IP. Also in attendance for the applicant were Mr Laurence Dawkins-Schwiening and Mr John Duffin, the Managing Director of Keyfix Limited.

10 After the hearing the applicant's representatives provided me with clarifying submissions via email highlighting page and line references for certain features of the invention. I confirm that I have considered these submissions.

11 On the 20th February 2025 further submissions were provided relating to arguments discussed at the hearing. In this email the attorney also outlined their preferred course of action and submitted a slightly changed set of proposed amendments, along with a further Patents Form 52. The preferred course of action was stated as:

> "…our first preference would be that the claims on file, which are those which were filed on 13 November 2024, are accepted and that the patent is granted

with these claims, thereby avoiding any requirement for further compliance period extensions.

If this is not possible, we would like you to consider our arguments in favour of granting discretionary extensions of time which we provided during the hearing, along with the form 52 which we have filed today, in order to refer back to the Examiner the claim amendment options (submitted below) for their consideration."

12 I would note that at the start of the examiner's letter dated 4th December 2024 there is reference to 'added matter' and 'conflict'. However, it is clear from subsequent discussion in the letter that these were issues that had been considered rather than issues which resulted in objections, and thus there is no need for me to consider them as part of this decision. Therefore, added matter and conflict are not relevant objections to the claims as filed on the 13th November 2024.

The Invention

13 The invention relates to the field of building construction, and more particularly relates to cavity trays for cavity walls.

14 The construction of buildings having cavity walls with an inner leaf, outer leaf and a cavity therebetween is common. However, problems regarding dampness can occur where moisture penetrates through the masonry of the outer leaf, or gaps thereof, which can then permeate the inner leaf of the cavity wall. Damp proof courses can be installed to prevent such moisture, but they are typically made of a combustible material, such as polypropylene, which can enable the spread of smoke and flames through the cavity to subsequent levels/ floors. Furthermore, when structural supports such as brackets and/or lintels at wall/floor slab junctions are utilised damp-proof courses and support brackets/lintels are required within close proximity to each other. Therefore, to prevent thermal bridging in these areas, insulation must be cut and manoeuvred into the space between the damp proof course and the support bracket/lintel. This can be difficult and time consuming and often results in improper installation of insulation, resulting in thermal bridging between the leaves of the cavity wall.

15 The cavity tray of the application aims to prevent moisture permeating the inner leaf of a cavity wall, to prevent the spread of smoke, flames and fumes in a cavity of a cavity wall and/or to prevent thermal bridging between leaves of a cavity wall.

16 The cavity tray 1,40 is made from non-combustible material, such as stainless steel, and can deliver moisture internal to the cavity wall 2 towards the outer leaf 5, for example through the use of an upper 12 and middle 14 section of the cavity tray. The cavity tray 1 has a lower portion 10 and in use the tray can overlap and/or underlie an adjacent cavity tray 42,43 lying within the same mortar course. The lower portion 10 is adjustable to correspond with a width of the outer leaf 5. The lower portion 10 can be trimmed. Figures 1, 5 and 8 of the application are reproduced below.

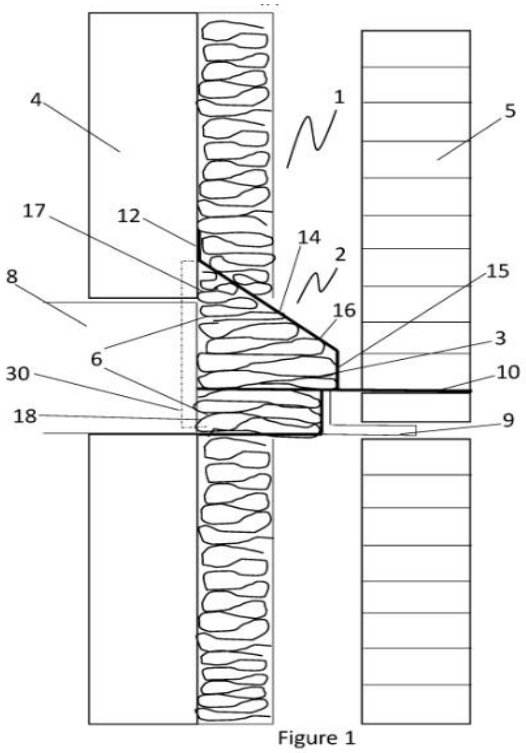


Figure 1

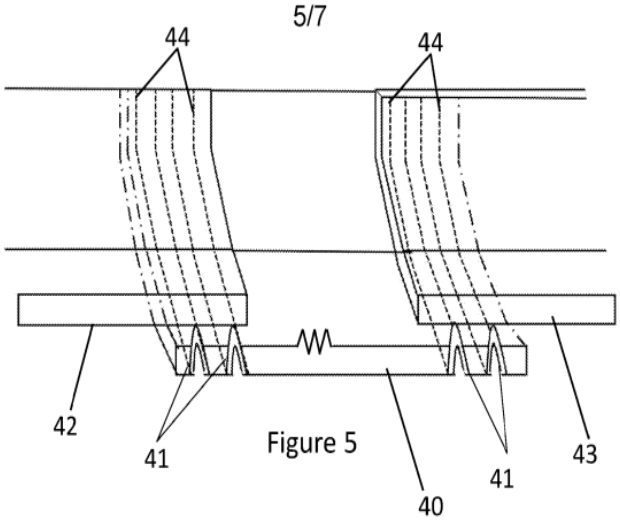


Figure 5

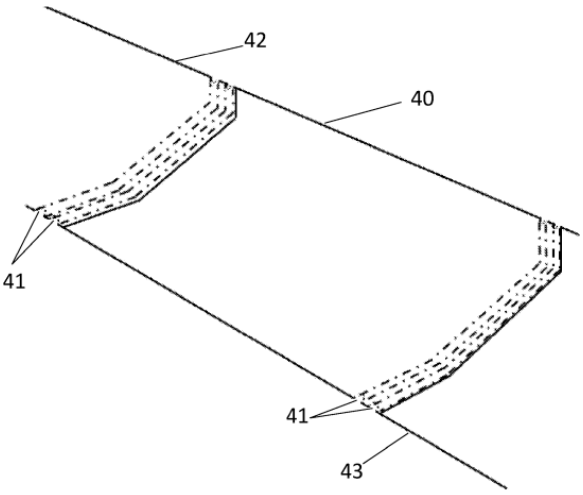


Figure 8

17 Claim 1 is the only independent claim. Claim 1 as amended on the 13th November 2024 is as follows:

1. A cavity tray for a cavity wall of a building comprising a means for delivering internal moisture towards the other outer leaf of a cavity wall, wherein the cavity tray is non-combustible, the means for delivering internal moisture towards the outer leaf of a cavity wall comprises a lower portion, the lower portion of the means for delivering internal moisture towards the outer leaf of a cavity wall is adjustable to correspond with the width of the outer leaf of the cavity wall, wherein, in use, any portion of the lower portion extending beyond the outer surface of the outer leaf of the cavity wall can be trimmed, wherein the cavity tray overlaps and/or underlies an adjacent cavity tray, in use.

The Law

18 The relevant provisions of the Patents Act for the purposes of this decision are sections 1 and 2 relating to general grounds for patentability and novelty:

> 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;
>
> (c) …
>
> (d) …
>
> and references in this Act to a patentable invention shall be construed accordingly.
>
> 2.-(1) An invention shall be taken to be new if it does not form part of the state of the art.
>
> (2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.
>
> (3) The state of the art in the case of an invention to which an application for a patent or a patent relates shall be taken also to comprise matter contained in an application for another patent which was published on or after the priority date of that invention, if the following conditions are satisfied, that is to say –
>
> > (a) that matter was contained in the application for that other patent both as filed and as published; and
> >
> > (b) the priority date of that matter is earlier than that of the invention.

19 Also, section 3 which defines an inventive step as follows:

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

20 In addition to statute, the courts have long used the so-called Windsurfing[1] test to assess issues of inventive step. This test was reformulated by the Court of Appeal in Pozzoli[2]. Paragraph 23 of this judgment lays out the test as:

> (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;

---

[1] Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd, [1985] RPC 59
[2] Pozzoli Spa v BDMO SA & Anor [2007] EWCA Civ 588

> (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?

21 Section 14 sets out various requirements for the making of an application. The relevant provision is section 14(5) which reads:

> 14(5) The claim or claims shall –
>
> (a) …
>
> (b) be clear and concise;
>
> (c) …
>
> (d)…

22 Section 125 of the Act sets out the extent of the invention as follows:

> 125.-(1) For the purposes of this Act an invention for a patent 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

23 Furthermore, section 20 (1) of the Act states:

> If it is not determined that an application for a patent complies before the end of the prescribed period with all the requirements of the Act and the rules, the application shall be treated as having been refused by the comptroller at the end of the period, and section 97 below shall apply accordingly

24 The 'prescribed period' of section 20(1), otherwise known as the compliance period, is set by rule 30. The compliance period is a prescribed period that can be extended by virtue of rule 108. Under rule 108(2), a two month 'as of right' extension is available, while under rule 108(3)&(5) a further discretionary two month extension can be requested.

Compliance Period

25 The first issue to consider is whether the applicant's request for a further discretionary extension of the compliance period beyond the 13th November 2024 should have been refused by the examiner. This request follows the 'as of right' extension, the first discretionary extension and the extension applied following third party observations. The extensions have resulted in the compliance period being extended by nearly 7 months.

26 The applicant has provided a number of grounds that they believe are suitable for the exercise of discretion. Firstly, they have referred to *BL O/610/22 [Wei Xu]*, where how close an application was to being acceptable was considered to be a relevant factor in determining whether to allow the request for an extension. The applicant proposes that the present application is very close to being acceptable as there are clearly significant differences between the present application and the closest prior art. However, there still appears to be a wide margin of disagreement between the

examiner and the applicant over whether the present application is novel or not, and how the claims should be construed. Also, the exercise of discretion relates to factors that are peculiar to the specific case rather than to those that are usual or normal for patent applications in general[3]. Thus, I do not consider the 'closeness' of the application to grant to be a valid reason to exercise discretion in the present circumstances.

27 Secondly, Mr Hanna discussed that the examination report of 14th August 2024 did not mention issues around construction of the "lower portion", or "adjustable to correspond…", which were in the claims at the time. These issues were only highlighted in the examiner's later letter of 4th December 2024 and, according to Mr Hanna, did not solely arise because of the amendments/arguments put forward by the applicant in their response of 13th November 2024. Mr Hanna suggested that if the applicant had been made aware of these points in the 14th August 2024 report, they could have taken steps towards progressing their application towards grant by the 13th November deadline. The report of 4th December 2024 also raised clarity issues of a "lower portion" and the issue of conflict which were not previously raised.

28 Mr Hanna highlighted the decision in *BL O/252/06 [Sun Microsystems, Inc.'s]* to support this conclusion. In particular, in Sun Microsystems the compliance period was extended because objections in an examination report issued within the compliance period did not include certain objections which were then raised after the compliance period expired. This was considered an omission by the office which justified discretion on the Comptroller's part to extend the compliance period under what was then rule 100(2), broadly equivalent to the provisions of rule 107 of the Patent Rules 2007.

29 As I noted at the hearing, the *Sun Microsystems* case was decided based on the provisions of the Patent Rules 1995, before the introduction of the ability to obtain 'as of right' and discretionary extensions of the compliance period. An extension under rule 107 for an irregularity/omission has not been sought here. Furthermore, it would appear to me that the issues regarding the clarity and construction of the "lower portion" the examiner has raised in their letter dated 4th December 2024 arose solely based on the amendments, and in particular the arguments made by the applicant regarding the construction of claim 1 in their letter of 13th November 2024, the day they requested the discretionary extension. While I am not convinced by the relevance of the *Sun Microsystems* decision to matters here, I do not accept that the issues discussed in the examiner's letter dated 4th December 2024 provide an adequate reason to exercise discretion to further extend the already extended compliance period.

30 Mr Hanna also outlined that the initial search report only referenced 'A' citations, and the first time they were made aware of the alleged novelty citation (the 'FOX' document) was on the 9th August 2024 due to the third party observations. Mr Hanna noted that this was summertime in most of the UK and thus difficult to set up a meeting to discuss the matters arising from the observations. This alleged novelty

[3] See discussion on practice in section 18.53-18.60 of the Act in Manual of Patent Practice - Guidance - GOV.UK

document was also not cited by the search examiners on any of the other divisional applications.

31 Mr Hanna has also set out that third party observations have been received on the applicant's other applications, and that there are very complex issues around the interpretation of claim 1 of the present invention as well as the teaching of the FOX document. Since this document only came to light on the 9th August 2024, Mr Hanna believes that a period of 5 to 6 months is reasonable to resolve these complex matters, noting that the divisional was only filed on 2nd May 2024 and thus the entire case could be resolved within 9 months. Mr Hanna also considers the certainty for third parties and the public has already been safeguarded by the voluminous quantities of third party observations already filed.

32 Whilst it is unfortunate that the FOX document was not cited in the original search report, the compliance period was extended by three months in order for the applicant to resolve any issues resulting from the third party observations – which is more than enough time in my opinion. I do not consider this to be an adequate reason for a further discretionary extension.

33 Furthermore, as outlined in The Manual of Patent Practice at 18.56, the complexity of the subject matter and/or absence due to holidays are factors which are usual or normal for patent applications. Similarly, any issue of complexity regarding the third party observations is due to the large number of divisional applications that the applicant decided to file rather than any intrinsic complexity of the application itself. I also note that it was the applicant's decision to file this divisional application so late in the day, requiring an 'as of right' extension to move the expiry of the compliance period to a date falling after the lodging the application. Thus, I do not accept that complexity of the subject matter and/or the application, or difficulties in setting up meetings during holidays are adequate reasons in the present case to exercise discretion to extend the compliance period.

34 Consequently, on the basis of the grounds sought in the skeleton arguments and at the hearing, I do not find these to provide valid reasons and therefore the examiner was correct in their judgment to refuse to exercise discretion to grant the extension requested by the Patents Form 52 filed on the 13th November 2024.

35 I will now go on to consider whether the application was in order when the extended compliance period expired. In particular, whether the claims filed on the 13th November 2024 are clear, novel and involve an inventive step.

Claim Construction and Clarity

36 The starting point for assessing whether the application is in order lies in construing the claims. This means interpreting the claims in the light of the description and drawings as instructed by section 125(1) of the Patents Act. 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 decisions of the High Court in *Mylan v Yeda*[4] and the Court of Appeal in *Actavis v ICOS*[5].

37 The claims of the application also need to be clear, as required by section 14(5)(b), and I shall consider this issue as part of my assessment of the construction of the claims.

38 Based on the disclosure of the application, it is reasonable to conclude that the person skilled in the art is an installer and/or designer of cavity trays or damp-proof courses (or the like) for cavity walls in various buildings.

39 Throughout correspondence, and at the hearing, the applicant and examiner have broken claim 1 down in order to aid assessment of the claim. I shall do likewise.

"A cavity tray for a cavity wall of a building comprising a means for delivering internal moisture towards the outer leaf of a cavity wall,"

40 In their letter dated 4th December 2024, the examiner construed this part of the claim as:

> "The claim relates to a cavity tray suitable for use in a cavity wall to deliver water towards an outer skin of the cavity, the tray is though claimed in isolation and not 'when used' and having a 'delivery means'."

41 In their skeleton arguments and at the hearing Mr Hanna agreed with the construction of this part of the claim. I also agree this this is a reasonable construction and that this 'functional' type claim (i.e. 'means for') would be clear to the person skilled in the art.

"wherein the cavity tray is non-combustible,"

42 The examiner construed this part of the claim as:

> "I am construing this as consistent with combustibility requirements in contemporary building regulations based on the context of the application being for a building component. This aspect will be anticipated by any specific statement that a tray is non-combustible, fire-proof or will not burn, or by the specification of any materials which are generally non-combustible in a construction context, e.g. construction metals"

43 In their skeleton arguments and at the hearing Mr Hanna agreed with the construction of this part of the claim. I also agree with the construction of this feature and consider that this aspect would be clear to the person skilled in the art.

'the means for delivering internal moisture towards the outer leaf of a cavity wall comprises a lower portion,'

44 The examiner construed this part of the claim as:

---

[4] Generics UK Ltd (t/a Mylan) v Yeda Research and Dev. Co. Ltd & Anor [2017] EWHC 2629 (Pat)
[5] Actavis Group & Ors v ICOS Corp & Eli Lilly & Co. [2017] EWCA Civ 1671

> "As noted above, the cavity tray is claimed in isolation, so a "lower portion" is potentially unclear. However, taking account of the purpose of the tray in draining water towards the outer leaf, and the next section of the claim, it is clear that this refers at least to a portion of the tray which is configured to extend through, and beyond, the outer leaf of the cavity wall. No other portions of the "delivery means" are defined; the lower portion may comprise all of the delivery means and may extend into the cavity."

45 I note that the portion of the cavity tray claimed is defined in relative terms (i.e. "lower"). However, I believe the person skilled in the art would readily construe the "lower" portion as relative to the delivery of moisture toward the outer wall using gravity, and that in order to provide the "means for" this delivery there must be some portion (i.e. upper and/or middle) above the lower portion – as shown in, for example, figure 1. Thus, "the lower portion" and the "means for delivering" would be readily construed and clear to the person skilled in the art.

"the lower portion of the means for delivering internal moisture towards the outer leaf of a cavity wall is adjustable to correspond with the width of the outer leaf of the cavity wall, wherein, in use, any portion of the lower portion extending beyond the outer surface of the outer leaf of the cavity wall can be trimmed,"

46 The "width" of the outer leaf is arguably a relative term. Whilst there is not any elaboration on this term in the description, it would be clear to the person skilled in the art that the "width of the outer leaf" refers to the horizontal dimension towards the cavity wall in figure 1 such as to represent the thickness of the outer leaf.

47 That the lower portion of the cavity tray "can be trimmed" and that the lower portion is "adjustable" are aspects of claim construction that the applicant and the examiner do not appear to agree on. The examiner has construed the "adjustable" and "trimmable" aspects as separate integers. With regard to the lower portion being adjustable the examiner considers that:

> "As the cavity wall, the outer leaf of the cavity wall and the width of the outer leaf of the cavity wall are not part of the claimed invention, these aspects cannot limit the invention. All that is required is that the lower portion must be adjustable in a manner that could accommodate different wall widths when fitted."

48 With regard to the "trimmable" aspect of the claim, the examiner notes that:

> "What we are left with is a cavity tray, in isolation, which is capable of being trimmed anywhere which ends up beyond the outer surface of the outer leaf of a cavity wall in which the tray has been fitted. However….the portion of the lower portion which ends up beyond the outer surface is unknown until the tray is fitted. In view of this lack of clarity relating to how much of the lower portion must be able to be trimmed, a cavity tray will anticipate this feature if it is possible to identify a lower portion of the tray which can be trimmed such that it is still capable of functioning as a cavity tray."

49 In the pre-hearing report and at the hearing Mr Hanna emphasised that the trimming *is the means by which* the lower portion is adjustable to correspond with the width of

the outer leaf. Mr Hanna also felt that, if the lower portion was to be trimmed to correspond with the width of the wall, the lower portion of the cavity tray would have to be trimmed back to correspond with the width of the wall.

50 Looking at the description, there is not much further information regarding the adjustability of the lower portion. I note that there are some references in the description to the adjustability of the cavity tray within the cavity – but this is not the same as adjusting the lower portion to correspond with the width of the outer leaf. Page 22 line 35 – page 23 line 2 describes the arrangement for the lower portion in similar terms to claim 1:

> "The arrangement for delivering internal moisture towards the outer leaf of a cavity wall 2 is flexible and adjustable. The length of the lower portion 10 is adjustable correspond with the width of the outer leaf 5 of the cavity wall. The lower portion is configurable to be trimmed. Therefore, in use any portion of the lower portion extending beyond the outer surface of the outer leaf 5 can be trimmed as required."

51 Whilst the description and figures do not explicitly state that the means of adjustment of the lower portion is by trimming, the person skilled in the art looking to work the invention of claim 1, and based on what is taught in the figures and the description, would understand that the *only* way for the lower portion to be adjustable to correspond with the width of the outer leaf is by trimming the lower portion extending beyond the outer surface of the outer leaf.

52 There was some discussion at the hearing with regard to the claim being to an apparatus – but defined by a property of the apparatus and/or a process applied to the apparatus (i.e. the cavity tray is trimmable in use to correspond with the width of a wall). Mr Hanna felt that there was no practical other way to define the features of the cavity tray, taking into account that not all walls are geometrically perfect, so that it is clear that the cavity tray when installed and in use doesn't project beyond the outer leaf of the cavity wall. Mr Hanna noted that there are occasions when you can only define a product by reference to other components. At the hearing Mr Hanna also referenced the "*No-Fume*"[6] case to support his position that claims of this type were allowable.

53 Whilst the wording of this part of the claim is not ideal, it would be clear to the person skilled in the art that the lower portion is of a material that can be trimmed and of a length that extends beyond the dimensions of a typical outer leaf in a cavity wall – such that the lower portion can be adjusted to correspond with the width in use of the outer leaf by trimming the lower portion extending beyond the outer surface of the outer leaf. In particular the length and material of the lower portion to provide adjustability could readily be achieved by the person skilled in the art.

"wherein the cavity tray overlaps and/or underlies an adjacent cavity tray, in use."

[6] In *No-Fume Ltd v Frank Pitchford Co Ltd, 52 RPC 231*, a claim to an ash receptacle for smokers in which the dimensions of certain parts were such that smoke from objects thrown into the receptacle did not emanate from the receptacle was allowed on the grounds that the invention could be realised by dimensions other than those disclosed, by experiments not involving inventive ingenuity.

54 The examiner has construed this part of the claim such that:

> "Since the cavity tray is claimed in isolation and not "when used", the only limitation this applies to the tray is that it must be suitable to overlap and/or underlie an adjacent tray "in use". A tray which overlaps and/or underlies an adjacent cavity tray, in use is indistinguishable in isolation from one suitable for overlapping/underlying. Any tray with specific overlap features will be relevant but also trays with flat edge regions are clearly suitable to overlap/underlie adjacent trays."

55 Mr Hanna disagrees with this interpretation. In particular, he felt it was clear from the drawings and description that the cavity trays of the present invention are designed to run in the same course of brickwork. In particular he has referenced the following passages from the description:

> "Preferably, the stop end of adjacent cavity trays abut against each other." (page 7 line 31 as filed)
>
> "Ideally, in use, the one or more ribs abut against the overlapping or underlying surface of an adjacent cavity tray." (page 9 line 34)

56 Further argument for the cavity trays being in the same course of brickwork is said to be found by the trays' capability of providing a fire barrier right around the cavity (see e.g. pages 10-11 of the description)

57 Looking at figures 5 to 8 of the specification, the cavity trays are clearly next to one another such that they are substantially aligned with one another. It is also clear from the description and figures that the overlapping/underlying of adjacent trays requires some form of abutment or direct contact of the cavity trays. Furthermore, provision of a fire barrier necessitates the trays to overlap/underlie with no gaps or spaces therebetween. The person skilled in the art would therefore understand that 'adjacent' means next to a cavity tray in the same course of brickwork.

58 The person skilled in the art would therefore construe this part of the claim as a cavity tray that is able to underly and/or overlay an adjacent cavity tray in the same course of brickwork when in use in a cavity wall. Whilst this part of the claim is defined by its intended use, overlapping/underlying of cavity trays seems to be a field in which the features of the tray itself may vary and yet the result may be readily achieved. In other words, the scope of this part of the claim would be clear to the person skilled in the art, not least because the features for overlapping/underlying of a cavity tray can be readily ascertained without inventive ingenuity, through minimal experimentation and/or trialling.

59 I have therefore construed claim 1 as filed on the 13th November and I consider this claim to be clear. I will now go on to consider whether this claim is novel and inventive in light of the cited prior art.

Novelty

EP1413687 A1 (FOX)

60 The examiner has based their objection to novelty on the disclosure of EP1413687 ("FOX"). It provides a cavity tray formed from a blank 10, as show in Figure 1 reproduced below. The blank 10 may be made of metal sheeting, especially lead sheeting. The blank comprises a number of fold lines (14,16,18), which may be in the form of a score line, marked line, or notional line. The blank 10 also has an incision 30. The fold lines 14,16,18 and incision 30 define a base panel 12, side panel 22, back panel 20 and front panel 26. The incision 30 enables the side panel 22 to be folded independently of the front panel 26. The folded form of the blank is shown in Figure 2.

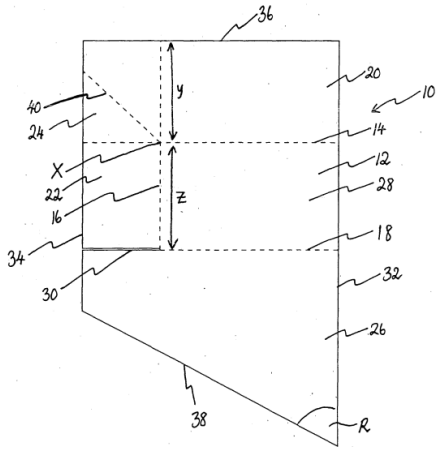


FIGURE 1

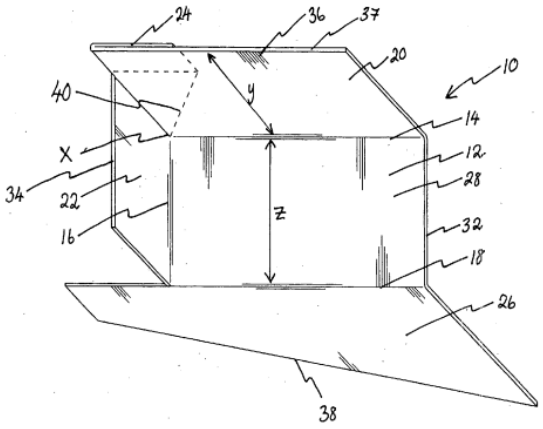


FIGURE 2

61 In use the cavity tray 10 is incorporated into an outer wall 52 of a cavity, and the back panel 20 may be obliquely disposed to the inner face 58 (i.e. makes an acute angle with the inner face 58) so as to extend, for example, approximately halfway across the cavity 53, or even to touch the inner wall 57 of the cavity wall 60. The arrangement is such that moisture running down the inner face 58 is able to pass between the inner face 58 and the back plate 20. Cavity trays 10 are incorporated into a respective brick layer of the outer wall 52 in a stepped or staggered arrangement such that the front panel 26 of one cavity tray 10 overlaps the front panel 26 of an adjacent cavity tray 10. The height Y of the panel 20 is preferably greater in dimension than the height P of a conventional brick 50. The depth Z of the base panel 12 is preferably approximately the same as the depth Q of the brick 50. Figures 3 and 5 of the FOX are provided below to show the positioning of the cavity tray in use.

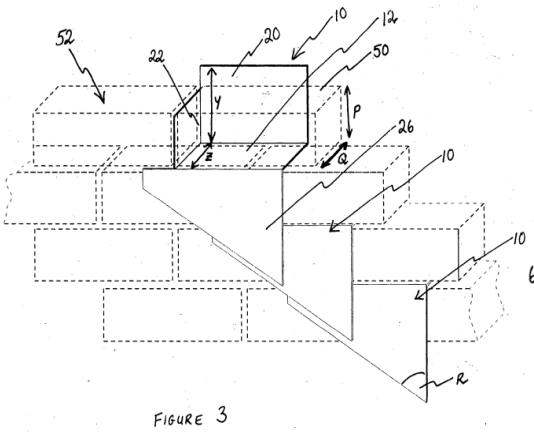


FIGURE 3

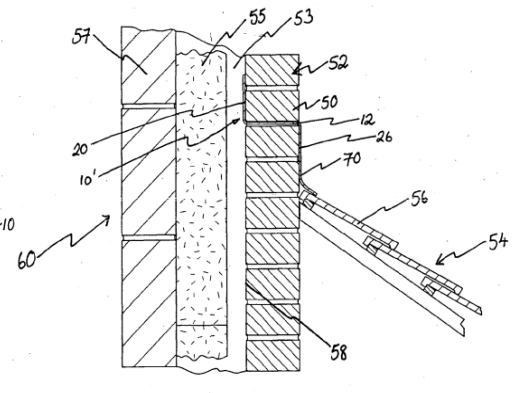


FIGURE 5

62 The examiner and applicant agree that FOX discloses a cavity tray for a cavity wall of a building with means for delivering internal moisture towards the outer leaf of a cavity wall. They also agree that the cavity tray of FOX is non-combustible and can be regarded as having a lower portion in the form of base panel 12. The examiner, however, also regards the front panel 26 as forming part of the lower portion. The applicant disagrees with this interpretation.

63 On balance, I do not consider part 26 to a comprise a means for delivering/draining internal moisture towards the outer leaf; it has a separate function external to the wall, and is defined by fold line 18. Thus, the if FOX provides an equivalent to the lower portion of claim 1, it comprises panel 12 only.

64 Claim 1 also requires that the lower portion is "adjustable to correspond with the width of the outer leaf of the cavity wall, wherein, in use, any portion of the lower portion extending beyond the outer surface of the outer leaf of the cavity wall can be trimmed".

65 According to the examiner, all that is required for the lower portion to be adjustable is that the lower portion must be adjustable in a manner that could accommodate different wall widths when fitted. The FOX document is said to describe the fit of the cavity tray to the dimensions of the wall, with dimension z matched to the depth of the brick. Furthermore, as the blank of the FOX document is made of a trimmable metal sheeting any portion of the lower portion (12,26) extending beyond the outer surface of the outer leaf of the cavity wall can be trimmed to leave an article which is still capable of functioning as a cavity tray.

66 Mr Hanna on the other hand argues that FOX does not disclose adjustability of the lower portion to correspond with the width of the outer leaf. In particular, he notes that the dimension 'Z' for the panel 12 of the cavity tray matches the depth of the brick – and that bricks are of a standard size (reference was made in the skeleton arguments to an NHBC 2025 standard 6.1 to emphasise this point). Therefore, the outer leaf is a standard thickness because it is constructed from courses of standard sized bricks. It was thus questioned how the FOX document discloses adjustability if the bricks are a standard size and the dimension Z of the panel 12 corresponds to this standard size, especially when the fold line 18 and the incision 30 are prefabricated into the blank.

67 Mr Hanna added that it would be extremely difficult to adjust the dimension Z as the fold lines 18, 14 as well as the incision (and other fold lines) would all have to be adjusted to allow the blank to be folded into a cavity tray.

68 Whilst the panels 12,20,22 in blank 10 for the cavity tray in FOX can be prefabricated to variable or unknown dimensions Y,Z, this does not disclose the lower portion of cavity tray being *adjustable*. Rather the dimensions of the lower portion of the cavity tray can be *set* to a required but undefined dimension (preferably to match the dimensions of a typical brick). I also note that simply trimming front panel 26 does not *adjust* the lower portion (i.e. panel 12) of cavity tray to correspond with the width of the outer leaf, as required by claim 1 as properly construed. Furthermore, whilst the fold lines in the blank may be 'notional', any attempt to 'adjust' the dimensions of the side, base and back panels could not work due to the prefabricated incision 30.

69 There is no disclosure in FOX of the dimension ‘z’ of panel 12 being greater or smaller than the width of a brick in an outer leaf. Nevertheless, if the person skilled in the art attempted to install the cavity tray of FOX into a brick wall having a width smaller than the prefabricated dimension ‘z’, the panel 12 *and the side panel 22* would extend beyond the cavity wall (forming an ‘L’ shape) and would not be trimmable. If the person skilled in the art attempted to install the cavity tray of FOX into a brick wall having a width greater than the prefabricated dimension ‘z’, only the front panel 26 would extend beyond the outer surface of the wall. I further note that if the front panel 26 were trimmed to the outer surface of the wall, not that I believe the application teaches or comes close to suggesting this, the side panel 22 would not extend to the outer surface of the wall – thereby creating a gap – and thus the cavity tray would not function as intended.

70 Therefore, FOX does not disclose the lower portion of the cavity tray being adjustable to correspond with the width of the outer leaf base as properly construed.

71 In their letter dated 12th December 2024, the examiner also argued that the tray of FOX would be suitable to overlap/underlie adjacent trays over the whole profile of the tray as it is formed with a flat edge region (right hand edge in figure 3) which an adjacent tray could clearly be fitted over.

72 The applicant argues that FOX does not disclose a cavity tray which can overlap or underly in the <u>same</u> course of brickwork. At the hearing Mr Hanna felt that the cavity tray shown uppermost in Figure 3 is too short to extend to the end of the virtual brick shown in dashed lines. As a result, there is no way for the trays to overlap, even if the cavity tray shown in figure 3 is moved up a course, it will still not extend longitudinally far enough to meet the adjacent cavity tray as a gap will exist, marked with shading in the annotated Figure 3 below.

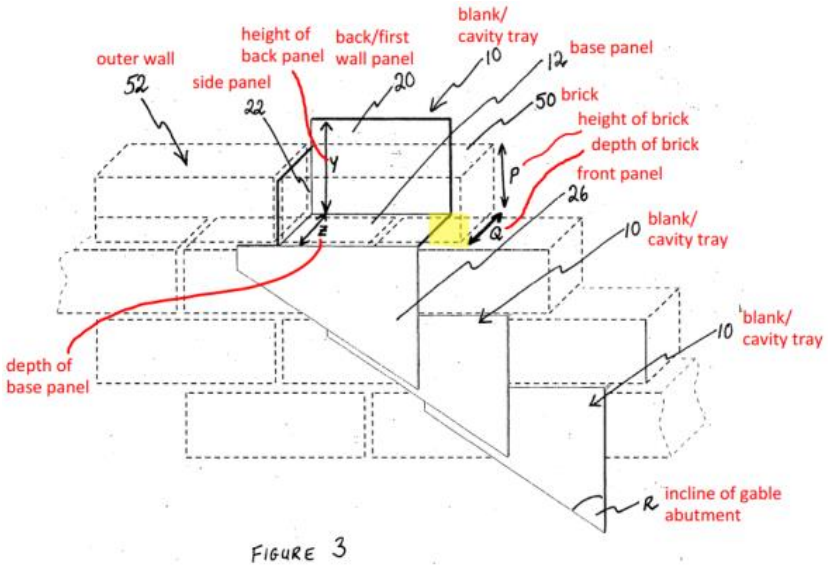
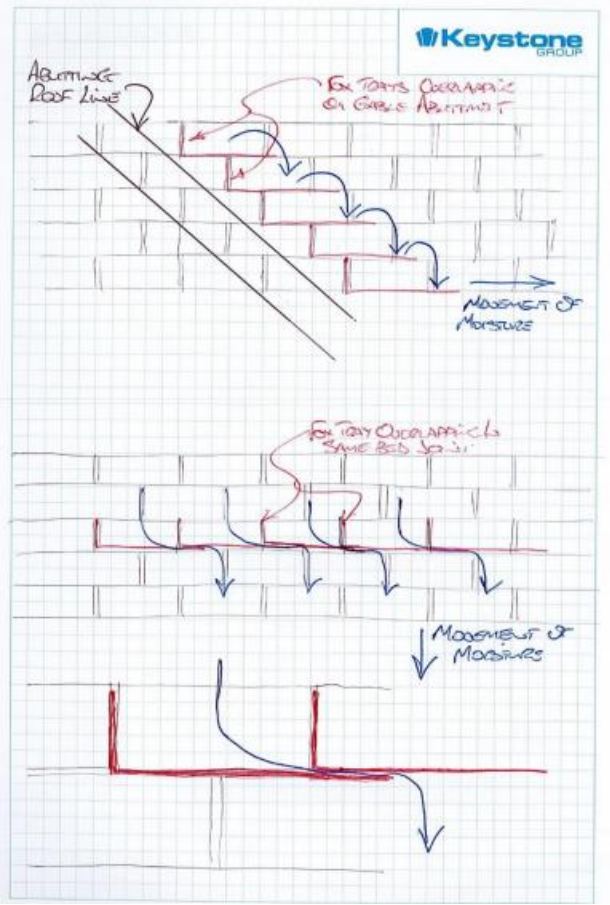


FIGURE 3

73 Mr Hanna also argued that the tray of FOX would not be suitable to overlap/underlie adjacent trays over the whole profile of the tray because doing so would cause liquid to flow underneath the overlapping tray and into the cavity and from there into one or more living spaces of the structure (see sketch below).



74 Whilst Figure 3 of FOX shows the cavity trays overlapping, they are not overlapping in the same course of brickwork as required by claim 1 as properly construed. Furthermore, if the person skilled in the art attempted to install the cavity trays of FOX in the same course of brickwork this would not result in them overlapping/underlying due to the side panel 22 being required to be between adjacent bricks and the panels 12,20,26 not extending longitudinally far enough.

75 Thus, while the front panels of FOX can be seen to overlap and tray located above or below, I do not regard FOX to provide a cavity tray which is capable of overlapping and/or underlying an adjacent cavity tray in the manner contemplated by claim 1.

76 Consequently, claim 1 as filed on the 13th November 2024 is novel in light of the FOX document. It follows that the dependent claims 2 to 23 are also novel.

Inventive step

77 The examiner's search identified GB2372513 ("BAYERS") and GB2588649 A ("ACS") and while both were mentioned in the examiner's final letter of 4th December 2024 neither were considered as novelty destroying citations for claim 1. The two documents were also absent in the informal inventive step objection raised by the examiner against dependent claims 13 to 18; the objection instead relying on the disclosure of FOX and what the examiner considered to be obvious workshop modifications based on commonplace practices/features.

78 At the hearing Mr Hanna nevertheless took time to talk me through the two disclosures to highlight why neither is relevant to a question of inventive step should a lack of inventive step be seen as an alternative objection against claim 1, using FOX as the starting point.

GB2372513 A (BAYERS)

79 BAYERS discloses a damp proof course 3 support 1,2 for use in a cavity wall. The support is made of plastic and comprises a limb 7 for mounting in an outer skin 8 of the cavity wall 4, a relatively longer limb 9 for spanning the cavity 6, and a hinge means 5 effectively linking the two limbs 7,9. A damp-proof course 3 is laid over the device 1, 2 so that it extends just over the width of the outer skin 8, across the cavity 6, being supported by the limb 9, and into the inner skin 14 at 18. Figure 3 of this document is reproduced below.

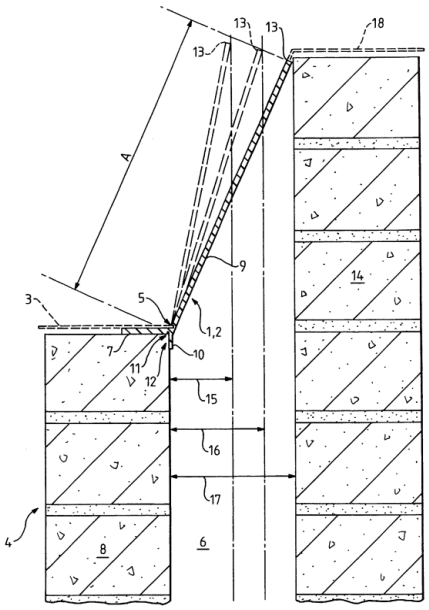


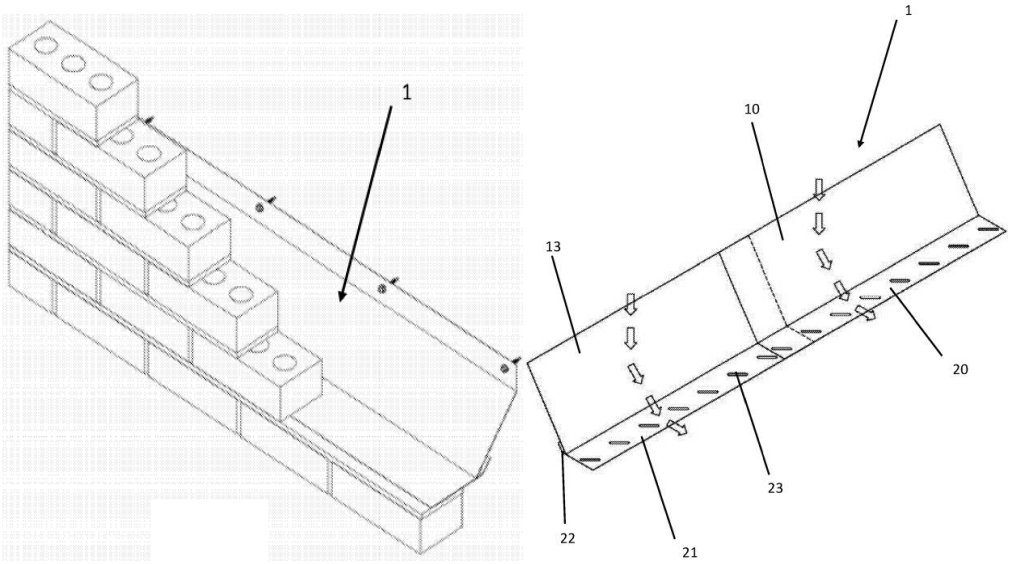
FIG. 3

80 Mr Hanna noted that this was a support for a damp proof course (which was not ‘non-combustible’) rather than a cavity tray per se. Whilst it addressed the issue of variable cavity widths the support did not have an adjustable lower portion. Mr Hanna also felt that using a damp proof course would taking a step backwards.

81 Mr Hanna argued that starting with the FOX document, which is a gable abutment tray, and addressing the general problem of improving the functionality of the tray (or more particularly to adjust the lower portion of the tray to correspond with the width of the outer leaf) there is nothing in the cited art that would lead to the arrangement defined in claim 1. Furthermore, the skilled person would be totally dissuaded from trimming the lower portion (base panel) of the tray of FOX. The cavity tray of FOX would not be adapted to overlap and/or underly because the invention is a cable abutment specific disclosure. For these types of trays, the cavity trays themselves (as opposed to the flashing secured thereto) are not normally considered overlapping and they are recognised not to be adaptable to so overlapping underlying due to the requirement of the stepped/staggered arrangement on different brick courses.

GB2588649 A ACS Stainless Steel Fixings Ltd

82 ACS Stainless Steel Fixings Ltd discloses a two-piece cavity tray system 1 which can be positioned within a cavity wall. The lengths of the first cavity tray 10 and second cavity tray 20 are preferably the same, such that easy overlap of the two trays will arise. The tray is made be made of a non-flammable material, such as stainless steel. Figures 1 and 4 are reproduced below.



83 Mr Hanna emphasised that in ACS the cavity tray is a two-piece adjustable tray that is designed to always be stepped back from the outer surface of the outer leaf, so that it does not protrude from the mortar joint (as shown in all the figures). And whilst ACS does disclose overlap, there is no disclosure of adjustability of the lower portion.

Assessment of inventive step

84 While not strictly necessary given the absence of a formal objection, following my consideration of novelty I will assess claim 1 to check that it is also inventive over the disclosures provided and thus in order at the end of the extended compliance period. I will assess claim 1 based on the *Pozzoli* test.

Identify the notional "person skilled in the art" and identify the common general knowledge of that person

85 As discussed above the person skilled in the art is felt to be an installer and/or designer of cavity trays. In their letter dated 13th November 2024 the applicant has identified the common general knowledge as "Certain important features of cavity trays such as sloped portions and securing means in the cavity and minimum dimensions for components of cavity trays". As demonstrated from figure 3 of BAYERS, it is also reasonable to conclude that the person skilled in the art would be

aware of a damp proof course extending beyond the outer leaf of the cavity wall, and that they would be aware of adjustable cavity trays in general as per ACS.

Identify the inventive concept of the claim in question or if that cannot readily be done, construe it

86 The applicant has phrased the inventive concept as:

> "that the lower portion [of the cavity tray] can be trimmed to maintain a neat appearance on the exterior wall for cavities/cavity walls of different sizes"

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

87 As identified above with respect to novelty, FOX (the "state of the art") does not disclose that the lower portion can be trimmed so as to adjust the lower portion to correspond with the width of the outer leaf, and that that cavity tray overlaps and/or underlies an adjacent tray in use.

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?

88 Whilst it might be common general knowledge for a damp proof course to extend beyond an outer wall, it is not common general knowledge for a cavity tray to extend beyond the wall such that it could be adjusted by trimming. Neither BAYER or ACS teach or suggest this. Moreover, the teaching of FOX would point away from any such trimming. The person skilled in the art would need inventive insight in order to adapt FOX for this purpose. Furthermore, FOX is a cavity tray for gable abutment and the tray would require significant adaptation to be used in the same course of brickwork. To my mind this further indicates the presence of an inventive step. It is my conclusion that claim 1 involves an inventive step over FOX.

89 Whilst not discussed in any detail during correspondence, I am also content that claim 1 is inventive starting with either of BAYERS or ACS as the state of the art.

Conclusion

90 I have found that no valid reasons have been provided to extend the compliance period beyond the 13th November 2024, and therefore the examiner was correct to refuse the applicant's request for a further discretionary extension of the compliance period.

91 I have found that claim 1 as filed on the 13th November 2024 is clear and is also novel and inventive in light of EP1413687, GB2372513 and GB2588649. It follows that the dependent claims are also considered novel and inventive.

92 Therefore, I will remit the application back to the examiner to complete the actions for grant and refund the fee paid for the unactioned Patent Form 52 received 20th February 2025. As the claims are in order at the end of the extended compliance period, which is the applicant's preferred course of action, I have not considered any of the proposed amendment options.

Appeal

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

BARNABY WRIGHT

Patent Examination Group Head