
Candidate's answer

Paper DII

Dear Sir,

After having studied the information that you provided to me, I would like to offer you the following advice in relation to each of your questions.

1) **Validity of claims 1-5 in Euro-PCT1 and ways to improve them**

PCT1 was filed on 1.4.04 claiming priorities from F1, D1 and IT1. PCT1 was filed within 12 m of the earliest priority and so priority seems to be validly claimed. In principle all requirements to validly enter the regional phase at the EPO have been complied with and the application seems to be standing in good order. Dealing now with each claim one by one, I can advise as follows:

CLAIM 1 - solar panels having undulating walls

This is disclosed for the first time in F1. Since priority from F1 has been validly claimed, this is entitled to 1.10.03 as effective date for the assessment of prior art under A54(2) and (3) (A89 EPC). Unfortunately, there seems to be prior art prior to this effective date. Under A54(2) EPC, the state of the art comprises everything made available to the public by means of a written or oral disclosure. According to your information, during the 2002 Tokyo Symposium on Solar Panels the disclosure was made of the use of undulating walls to mechanically strengthen the panels. Although the printed proceedings for this Symposium were not made available until May'04, i.e. after the effective date of claim 1, the disclosure during this public conference took place in 2002 and thus amounts to prior art citeable against claim 1 under A54(2) EPC.

Unless we can provide sound reasons against the printed document being a true account of what was said during the conference, it will be assumed that the printed document reproduces the oral description (C-IV-5.1, D-V-3.3) and thus the disclosure in the 2002 conference will be prior art. Since in that article and hence presumably in the conference panels having undulating walls and in particular a panel 1 m long with walls having 20 undulations per metre (U/m) was disclosed, claim 1 would not be novel (A54(1) EPC).

Since apart from this single panel, no other disclosure appears to have been made, we could try to regain novelty by amending claim 1 to exclude what has been disclosed (the panel 1 m x 20 U/m).

The insertion of such a disclaimer, which is not contained in the application as filed, will only be acceptable at the EPO following G1/03, i.e. will not be regarded as being against A123(2), if it is used to restore novelty against an accidental anticipation under A54(2). Moreover, according to this decision it is necessary to remove no more than strictly necessary to restore novelty. Though the disclosure in the Japanese symposium deals with solar panels, since it deals with an uncompletely related problem to the one we attempt to solve (mechanically strengthening panels versus improving thermal efficiency), we may well be able to argue that the disclosure of a panel having undulating walls with 1 m long and 20 U/m is an accidental disclosure.

I would therefore propose to amend claim 1 by inserting a disclaimer to exclude this panel disclosed in 2002. Such a claim would then be novel. Since the technical effect of these panels, i.e. their improved thermal efficiency, cannot at all be derived from the prior art, I believe such a claim will be regarded as inventive (A56) and hence as patentable – it is clear it has industrial application under A57 too.

I would also suggest, in view of this prior art we have discussed, to insert a claim directed to the use of undulating walls in solar panels to improve their thermal efficiency.

Apart from the disclosure in the Tokyo Symposium, there is no other prior art.

CLAIM 2 – solar panels having undulating walls with 5-16 U/m

This invention is disclosed for the first time in the German utility model D1. Under G2/98, it cannot be regarded as the same invention as the panels disclosed in F1 and thus cannot be entitled to that priority. Under A87(1), priority can be claimed from utility models, so the German priority is valid.

There is no prior art before the effective date of this claim (15.3.04) disclosing panels having undulating walls with 5-16 U/m. The Japanese symposium does not destroy the novelty of such a claim since it disclosed only one panel having 20 U/m → the claim is thus novel (there is no other prior art apart from this of an earlier date). In addition, this claim can be regarded as inventive since the disclosure in Tokyo does not at all anticipate that panels having wavy walls and this range of undulations will exhibit improved thermal efficiency, this JP disclosure dealing only with the mechanical strength of solar panels.

Claim 2 thus seems to be valid in the light of the prior art known to us.

CLAIM 3 – Solar panels having undulating walls with 5-16 U/m and < 3 m length

Such a combination of features (5-16 U/m) and length < 3 m cannot be considered as directly and unambiguously derivable from the disclosure of D1, since D1 discloses panels having 5-16 U/m but of any length (even if specific examples all have 1 m of length) → thus the criteria according to G2/98 for validly claiming priority for the same invention are not fulfilled. The effective date of claim 3 is thus the priority date of IT1, i.e. 22.09.04.

The Tokyo Symposium does not disclose panels having 5-16 U/m and thus does not destroy novelty of such a claim. However, in addition to that, there are 2 further pieces of prior art to consider:

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- EPB has an earlier filing date (April'04) and was published later (we know it is published because the 18-M period for publication expired October'05 and moreover you have detected said publication). Assuming designation fees are paid for EPB, this will be prior art under 54(3) for the assessment of novelty (A54(3)(4), R23a). By the way, this is irrespective of the fact that eventually the common designations may be withdrawn in EPB. Changes taking effect after the valid publication of the application do not affect its status as prior art under A54(3) (see C-IV-6.1a).

EPB discloses a panel having 10 U/m x 2 m long, i.e. a panel which falls within the scope of our claim 3 → claim 3 is not novel over EPB.

According to G1/03, it would be possible to introduce a disclaimer to restore novelty against this A54(3) disclosure (from what you have told me I have understood that the structure of the panels in EPB is new and different to yours but that there are 2 embodiments of panels such as yours disclosed in EPB).

- However, in addition to EPB, also D1 is prior art. D1 was published on 15.09.04 and thus is full prior art under A54(2). Since D1 discloses panels having 5-16 U/m albeit of any length – but all examples disclosed fall within the scope of claim 3 (all have 1 m of length), claim 3 is not novel over the publication of D1. Moreover, D1 is also prior art relevant for the assessment of inventive step. Claim 3 thus does not seem to be valid.

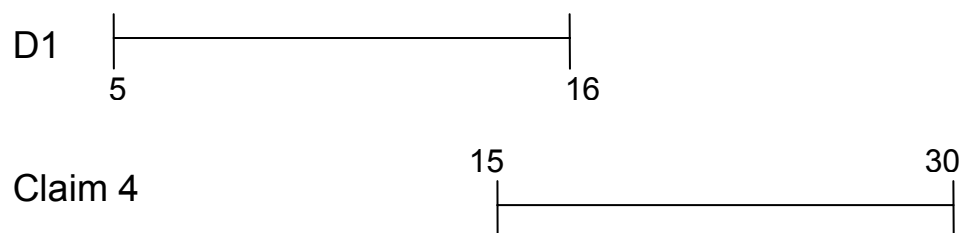
CLAIM 4 – Solar panels having undulating walls with 15-30 U/m and > 3 m length

Such a combination of features is only disclosed for the first time in IT1 and thus according to G2/98, it is only entitled to that priority date (cannot be regarded as the same invention disclosed in F1 or D1).

The disclosure in JP does not disclose any panel having the features of claim 4 (20 U/m but 1 m long).

EPB is prior art under A54(3) for the same reasons discussed above in relation to claim 3. EPB discloses a panel having 20 U/m and 4 m long, so falling within the scope of claim 4 → claim 4 is not novel (A54(1)). It will be possible to restore novelty by disclaiming this specific combination → such a disclaimer will not be regarded as added matter under A123(2) following G1/03.

We should also consider the effects of D1, which was published before the effective date of claim 4. All embodiments disclosed in D1 correspond to panels of 1 m of length, so none falls within the scope of our claim 4. However, claims in D1 are not limited to any specific length and disclose thus any panel having 5-16 U/m. The range claimed in claim 4 clearly overlaps with the range disclosed in D1.



Claim 4 is not novel since it includes the explicitly mentioned end-point of the known range from D1. In order to restore novelty, it will not be sufficient to exclude the specific novelty destroying value. It is necessary to consider whether the skilled person would consider seriously to work in the range of overlap; if he would do so, no novelty (T26/85).

However, we have basis in the disclosure of IT, which according to what you told me has all been included in the PCT1, to narrow the claim so as to avoid overlap with the range disclosed in D1.

Since in IT and thus PCT1 we have included embodiments showing the technical improvement over both claimed ranges (i.e. the one in claim 3 and claim 4) for all integer values of undulations per metre, it would be possible to amend claim 4 to direct it to panels having a range of 17-30 U/m + > 3 m length. Such a new claim will not be regarded as added matter under A123(2) (see T201/83, also T925/98). Such a claim will not overlap with the disclosure in D1 and thus should be regarded as novel. Moreover, since D1 discloses that in order to obtain good results it was necessary that the number of undulations x m was between 5 and 16, we will be able to argue that it was unexpected that panels having ranges above that range prove to be also effective. So I believe we will be able to argue that such a claim is inventive in addition to novel.

CLAIM 5 - Extrusion process

This was disclosed for the first time in F1. Since there seems to be no prior art before the effective date of F1 disclosing such a process, I believe such a claim is valid, i.e. patentable.

2) Extension of EuroPCT1 to UK/BE

Yes, it is still possible to designate UK and BE in EuroPCT1.

EuroPCT1 was regionalized on Nov'05 and only DE, FR, IT were designated. I assume you mean only the designation fees for these 3 countries were paid (or the intention to pay for these 3 countries was indicated in the request for Entry into regional phase). According to R107(1)(d), designation fees must be paid within 31 months from the earliest priority date if the period under A79(2) (6 m from publication of search report) has taken place earlier. Here regional phase was entered much well before the 31 M time limit. 31 M term ends: 1.10.03 → [31 m] → 1.05.06 closed [R85(1)] → 2.05.06 Tuesday.

So until that date it is possible to validly pay the designation fees for UK, BE and any other country. I would suggest to pay 7 designation fees in total in view of Bad's activities, since that will be deemed to cover designation fees for all countries (RFees, 2.3). You can always later on withdraw a designation if you so wish.

3) Ways to postpone national phase entry for PCT1

One way to do this would be to withdraw the claim to priority from F1. According to the present situation for PCT1, national phases under A22 PCT must be entered within 30 m from the earliest priority, i.e. by 1.04.06 (possibly extended to 3.04.06 since 1.04.06 is a Saturday).

Under R90bis.3(a) PCT it is possible to withdraw a priority claim at any time before expiration of 30 M from priority date. So we are on time to do this.

If there is more than 1 priority, as is the case here, the applicant can exercise the right under R90bis.3(a) in respect of one or more priority claims (R90bis.3b). Under R90bis.3(d), any time limits computed from original priority and not yet expired will be recalculated. If priority is withdrawn now, entry into national phases under A22 or A39 will be delayed until 30 M from D1 (15.03.04), i.e. until 15.09.06. This will allow you enough time to take decisions on the project, which are expected by June.

4) Actions against Mr Bad – stop him?

As discussed under section 1) above we will be able to obtain in EuroPCT1 claims directed to:

- a) panels with undulating walls (with disclaimer) (subject to convincing the EPO that disclosure in JP is accidental)
- b) claim 2 panels with 5-16 U/m
- c) claim 4 panels with 17-30 U/m + >3 m long

If we enter national phases in other countries (US, JP), we will also be able to obtain patents there. In the USA, by virtue of the grace period of 1 year, the disclosure of D1 will not be prior art against claims in PCT1 entitled to the priority of IT1 since less than 1 year occurred between the two. We should check JP legislation because also a grace period seems to exist there. Moreover, since EPB was only filed in Europe, with no equivalent disclosures taking place elsewhere, the effects of EPB as prior art as discussed above will be constrained only to Europe, since its publication date (18 M from April'04, i.e. around October'05) is well after the filing date of PCT1.

So in the USA Good will be able to obtain broader protection even than in Europe, in particular claim 3 and 4 as contained in PCT1.

Once these patents are granted, Good will be able to stop Bad selling any solar panel with undulating walls falling within the scope of their granted claims.

Since Bad is already offering panels and has in fact started selling at least in UK and BE, I would strongly advise you to try to speed up as much as possible prosecution of EuroPCT1 under the PACE program (OJ 2001, 459). Under A67(1), from the date of publication of an EP application, this already confers provisional protection. In certain countries, a published application does not confer the full effects provided under A64, only the right to claim for reasonable compensation. Certain countries require that claims be published in the language of that state for that protection to become effective (A67(3)).

Since under A158(1) EPC publication of PCT1 takes the place of publication of the EP application, provisional protection under EuroPCT1 is already available. We should check national requirements and file translations as required. Copy of the application and probably translations should be submitted to the infringer, Mr Bad.

Also in the USA and other countries we may be entitled to provisional protection.

We should monitor the activities of Bad and if he is going to act in any other market in addition to Europe I would recommend to enter national phases under PCT1 as soon as possible.

5) Can Bad stop us?

Bad has only EPB as potential right to use against us. So, he can't do anything at all against us outside Europe.

As to EPB, from the information you had provided me, it would seem as if Bad would have obtained information on your panels illegally via your former research manager, Mr Ugly. If that would be the case, it would be possible to try to obtain title to EPB since an EP patent shall belong to the inventor or successor in title and Mr Bad maybe is not the inventor.

In principle, proceedings could be started against him claiming entitlement to his alleged invention and thereafter, once a final favourable decision was obtained, claim the right to EPB under A61. However, from what you have told me, it seems it may be extremely difficult to prove such an allegation, so it seems we do not have much chances here.

So, assuming he retains EPB, he may be able to obtain a patent for whatever new is disclosed in his application. I am not sure to have fully understood the contents of EPB from your comments. You say it claims a new structure for superposed panels. It seems to me that this is different to your structure in your panels. If this is so, you should not concern much about his patent.

As long as your panels do not fall within the scope of their granted claims, Bad will not be able to stop you. It is irrelevant if there is disclosure of panels such as yours in the description, that has only relevance with regard to the effects of EPB as prior art against you. In such a case, at the most he could try to obtain claims directed to the only two specific embodiments of panels with undulating walls disclosed, 10 U/m x 2 m and 20 U/m x 4 m. Those have as effective date April'04. Though specifically these two panels have not been previously disclosed in any prior art – the relevant prior art for them is the Tokyo proceedings under A 54(2) and your EuroPCT1 under A54(3) for all commonly designated states – it is very improbable that he can get claims granted on them since no effect is explained, so no technical teaching different over the disclosure in Tokyo 2002. If he could get such claims, the effect would be that while his patent would be dependent on yours since it has a later effective date, you would not be able to sell such two panels without Mr Bad's permission. Of course, as stated under 4), he will not be able to sell without your permission. So, in view of the fact that your EuroPCT1 is entitled at least to F1 and D1 dates, which are earlier than EPB date, it is hardly possible that EPB can get any blocking claims.

As to his offer to withdraw embodiments, this does not make much sense. Under A54(3), as stated above, his application is prior art as from its valid publication, whatever happens later to his application. So even if he would delete those embodiments now, that would not change the effect of EPB as prior art under A54(3) (see my discussion earlier on).

Your position seems to be pretty good, so no need to discuss any agreement with him.

Only if contrary to my understanding explained above, his application EPB would indeed contain claims that would potentially cover your intended acts, i.e. the panels you wish to manufacture, should we then consider starting discussions with him. In any event, because you have an earlier effective date in EuroPCT1, you will be able to obtain broader protection (your application would moreover be prior art under A54(3) against him for all validly common designated states) and so will always be in a better position for negotiating.