Candidates' answer

Dear Mr. Good,

Thank you for your letters of X March 2006. I have considered the matters you have discussed and can advise you with respect to your specific questions as follows.

Claims 1 to 5 of Euro-PCT1

Claim 1

Claim 1 is directed to solar panels having undulating walls. This subject matter was first disclosed in your FI patent application (filed on 01.10.2003), from which PCT1 validly claims priority (EPCa.87(1), G2/98). The effective filing date of this subject matter in PCT1 is therefore 01.10.2003 (EPCa.89). The only disclosure of solar panels with undulating walls before this dare is apparently the Tokyo Symposium held in 2002. Prior use of this nature is part of the state of the art under EPCa.54(2).

In order for alleged prior use to be novelty-destroying, it must be clear when, what and under which conditions the disclosure took place (D-V, 3.1.2). As the publication of the Symposium of May 2004, although not itself prior art, what appear to substantiate these facts, the disclosure of the use of undulating walls in 2002 would appear to destroy novelty of claim 1. Indeed, if the prior use was in fact an <u>oral</u> disclosure, the post published written version is assumed to be a true account of the disclosure (D-IV, 5.1, last sentence), and there does not appear to be any reason to dispute this.

Thus, claim 1 would appear to lack novelty. However, on the basis of the published article, the only disclosure in 2002 was of the use of undulating walls to mechanically strengthen the panels. It may therefore be possible to reformulate claim 1 as a 'use' claim (C-III, 4.9), directed towards the use of undulating walls to increase the thermal efficiency of the panel. As this use was not disclosed in 2002, and as you are aware of no other disclosure, such an amendment should render claim 1 patentable, as there was no suggestion that this technical would be achieved (EPCa.54 & EPCa.56).

Claim 2

Claim 2 is directed towards solar panels having undulating walls with 5-16 undulations per metre. This subject matter was first disclosed in the utility model application D1 (filed on 15.03.2004), from which PCT1 validly claims priority (EPCa.87(1)) (utility models explicitly mentioned), G2/98). The effective filing date of this subject matter is therefore 15.03.2004 (EPCa.89). Again, the Tokyo disclosure of 2002 is comprised in the states of the art under EPCa.54(2). However, as there is no disclosure of panels having undulations of 5-16 per metre (the only example has 20 undulations per metre), this claim is novel (EPCa.54). There are no other possible disclosures before the 15.03.2004 date.

Despite this, I am not confident that claim 2 would be considered inventive (EPCa.56). This is because the technical effect achieved by having 5-16 undulation per metre is <u>dependent</u> on the size of the panel. Your Italian laboratory says that the panel must be less than 3 metres long for the "better results" to be seen. As claim 2 is not limited to panels of this size, the advantage is not present across the entire scope of the claim, and it is therefore objectionable for lack of inventive step (EPCa.56) in light of the Tokyo 2002 disclosure (T 939/92 "Agrevo"). I therefore think that claim 2 is invalid.

The only possible amendment to overcome this would be to incorporate the limitation that the panel must be less than 3m. However, as this would arrive at claim 3 anyway, there is no need to do this. Perhaps restrict to the exemplified (1m) panels in this range, if there is basis (EPCa.123(2)).

Claim 3

Claim 3 is directed to solar panels having undulating walls with 5-16 undulations per metre (U/m) <u>and</u> being less than 3 metres in length). This subject matter was first disclosed in the Italian patent application IT1 (filed 22.09.2004), from which PCT1 validly claims priority (EPCa.87(1), G 2/98). The effective filing date of this subject matter is therefore 22.09.2004.

In this regard, I am not concerned that D1 would be regarded as the "first application" for this subject matter (which would invalidate the priority claim to IT1 (EPCa.87(1) + EPCa.87(4)) merely because of the Example in that document falling within the scope of claim 3, because the test for priority entitlement is not the same as the test for novelty in this situation (G 2/98).

The disclosures that pre-date the effective filing date of claim 3 (22.09.2004) are the Tokyo Symposium Disclosure of 2002 and the corresponding publication of May 2004 (EPCa.54(2)). However, these would not be novelty-destroying as the 5-16 U/m feature is not disclosed (the example has 20 U/m). D1 was also made available to the public before 22.09.2004 (on 15.09.2004) and is therefore also comprised in the state of the art under EPCa.54(2). Unfortunately, D1 discloses embodiments wherein the panel of 1m having undulating walls with the 5-16 U/m range. This falls within the scope of claim 3, such that it lacks novelty (EPCa.54(2)). This claim is therefore invalid.

EPB will be comprised in the state if the art for claim 3 under EPCa.54(3) and (4) for all designated states for which fees are paid (EPCr.23d).

As EPB discloses an example solar panel of 2 metres with undulations of 10 U/m, this will also be novelty destroying for claim 3, <u>provided</u> the designation fees are paid.

There does not appear to be much scope for amending claim 3 to render it allowable. We are not told what basis there may be in the application as filed (EPCa.123(2)) to get around the publication of D1. Given that D1 is directed towards the same technical effect, and discloses a panel size in the less than 3m range, it is hard to see how any amendment to sub-ranges of panel size would be inventive anyway (EPCa.56). Claim 3 therefore appears invalid, and should be deleted.

CLAIM 4

Claim 4 is directed to solar panels having undulating walls with 15-30 undulations per metre (U/m) and being <u>more</u> than 3m in length. This subject matter was first disclosed in the Italian patent application IT1 (filed 22.09.2004), from which PCT1 validly claims priority (EPCa.87(1), G 2/98). The effective filing dare of this subject matter is therefore 22.09.2004.

Once again, the two Tokyo disclosures of 2002 and 2004 are part of the state of the art under EPCa.54(2). However, as they do not disclose a solar panel of greater than 3m in length (the example is 1m), they will not be novelty destroying. Moreover, the subject matter of claim 4 would be inventive over these disclosures (EPCa.56), because they relate to mechanical strength, and are nothing to do with improved thermal efficiency.

The disclosure of D1 on 15.09.2004 is also comprised in the state of the art under EPCa.54(2), but as this does not disclose panels greater than 1m in length (the example), the feature >3m in length should establish novelty (even if this was regarded as a "sub-range" of the <u>unspecified</u> size limits of D1, I believe the invention would be regarded as a selection invention under T279/89 and C-IV, 7.7(ii) because the sub-range is narrow vis-à-vis the <u>undefined</u> range in D1, it is far removed from the example in D1 (1m) and there is a technical effect – improved thermal efficiency – associated with the new range).

However, EPB would be comprised within the state of the art under EPCa.54(3) and (4) for all states in common, because it was filed earlier than the effective filing dated of claim 4 (April 2004 vs. 22.09.2004) and publish under EPCa.93 after (publication would have been around October 2005). The specific example of a solar panel of 4m and 20 undulations/metre would destroy the novelty of claim 4.

If this happens (i.e. if the designation fees are paid such that there is a problem), then claim 4 could be easily amended to establish novelty. As EPB is a 54(3) document, the specific example could be disclaimed (G1/03 and G2/03). Alternatively, as EPB does not attach any explanation (i.e. <u>purpose</u> or <u>effect</u>) to the undulations, claim 4 could be converted into a "use" claim as discussed above. However, this should not be necessary.

Claim 5

Claim 5 is directed towards the extrusion process, as disclosed in F1, filed on 01.10.2003. PCT1 validly claims priority from this application (EPCa.87(1)), so the effective filing date of this subject matter is 01.10.2003 (EPCa.89). The only earlier disclosure that we know about is the Symposium of 2002, as evidenced in the publication of 2004.

However, this does not appear to mention any methods for making the undulating panels, so claim 5 is certainly novel (EPCa.54). There is no suggestion that the process is obvious (EPCa.56(1)), but I would confirm this with client.

N.B. Forgot to say that a <u>translation</u> of IT1 into French, German or English (EPCa.14(1)) will need to be filed before the end of the period set for responding to any EPCa.51(4) communication received on Euro-PCT1 to maintain the priority date (EPCr.38(5)). However, as there are no intervening disclosures between 22.09.2004 and 01.10.2004 (filing dates of IT1 and PCT1 respectively), this is not so relevant).

In summary therefore, you should be able to obtain the following claims from Euro-PCT1:

- (i) Use of undulating walls in solar panels to increase thermal efficiency.
- (ii) Solar panels with undulating walls with 15-30 undulations/metre and >3m in length (possibly with 4 metre and 20 undulations/metre disclaimed); and
- (iii) Extrusion process.

May also yet get claim to panels with undulations in 5-16 u/m range, 1m length depending on basis.

Extension of Euro-PCT1

Euro-PCT1 was entered into the European regional phase <u>early</u> in November 2005. The due date for paying designation fees under EPCa.79(2) is 6 months from mention of the publication of the search report, which is the date of publication of the <u>international</u> search report under EPCa.157(1).

PCT1 was due to publish 18 months from the earliest priority date o 01.10.2003 (PCTa.21(2)(a)) => around 01.04.2005. The ISR would have been published around this time so the 6 month period will have expired around October 2005. Designation fees for Euro-PCT1 are therefore due by the <u>later</u> time of 31 months from the earliest priority date (EPCr.107(1)(d) will apply, meaning that designation fees can be paid up to 31 months from the filing date of F1 (01.10.2003), i.e. 01.05.2006. (Extended to Tuesday 02.5.2006 on account of EPCr.85(1)).

There is therefore still time to pay the designation fees without surcharge. You should pay the fees for the UK and Belgium before the above-noted date if you wish to obtain protection there. As this means you would be paying 5 designation fees, it seems reasonable to pay 2 more, and thereby have <u>all</u> applicable states designated (Rfees 2(3)). The difference is only €150 (2 fees), and you say that that you expect good sales "throughout Europe", so it would certainly make sense to pay these additional fees. It would also mean that the application extends to your 'home' state (NL) and the 'various others' where you are active.

If you want to pay these fees late (with surcharges) there is a 2 month grace period as from the 02.09.2006 due date (EPCa.108($\underline{4}$), even though you have not designated other states on entry; (OJ 2005, 11&126).

National phase entry of PCT1 outside Europe

National phase entry of PCT1 <u>outside</u> Europe could be postponed by <u>withdrawing</u> the earliest priority claim in PCT1 under PCTr.90bis.3(b). To do this, a request must be filed at the receiving office or International Bureau (PCTr.90bis3(c)) <u>before</u> the expiry of 30 months from the (<u>current</u>) earliest priority date, i.e. 30 months from 01.10.2003 = 01.04.2006 (Extended to Monday 03.04.2006 on account of PCT r80.5) (PCTr.90bis3(a)).

This withdrawal has the effect that any time limit not already expired (which in this case includes the 30 month period for entry into the national phase under PCTa.22(1), which is Monday 3rd April 2006, as explained above) is recalculated as the basis of the next earliest priority date (PCTr.90bis3(d)).

This would mean that the new due date for national phase entry under PCTa.22(1) would be 30 months from the filing date of D1 (15.03.2004), therefore Friday 15th September 2006. This is well <u>after</u> the time you expect to have decisions from the inventors (June).

For the avoidance of any doubt, withdrawing the first priority claim in this way could <u>not</u> effect the priority claim in the Euro-PCT1, because this has already been entered into the European regional phase (PCTr.90bis.6).

By developing national phase entry in this way, no surcharges would be due for late entry outside Europe. However, as the effective filing date the subject matter in F1 would become the <u>actual</u> filing date of PCT1 (01.10.2004), you should bear in mind that it would face the publication of D1 as full prior art, rendering the proposed use claim (see above) lacking in novelty. The proposed process claim should not be effected.

Can you stop Mr Bad?

Mr Bad is selling panels with undulating walls (one with 10 undulations per metre, the other with 20 undulations per metre) in the UK and Belgium. He also offered to sell various panels in Spain in October 2005.

PCT1 was published around 01.04.2005 (18 months from earliest priority date of 01.10.2003 PCTa.21(1)).

This publication takes the place of publication of Euro-PCT1 (EPCa.158(1)), from which time provisional protection under EPCa.67(1) will have started for those states where the language of PCT1 is an official language (EPCa.167(3) and Nat. Law Table IIIA).

By selling panels with undulating walls, Mr Bad is infringing claim 1 as filed and published. Moreover, by selling panels with walls with 10 U/m and 20 U/m he will be infringing claim 2 as published and possibly claim 3 as published (if the 10 U/m one is <3m) & claim 4 as published (if the 20 U/m one is longer than 3m). This provisional protection is limited to scope of the eventually granted claims (EPCa.69(2)), to his infringement of claims 2 and 3 (which I do not think will be granted) will be irrelevant. However, he would still be infringing claim 1 in its proposed "use" format (although some states may require him to be advertising the "purpose" of the undulations) and claim 4 (unless he falls within the scope of any disclaimers).

On this basis, Mr Bad will be infringing your patent as published and granted, so you will be able to stop him. However, this protection will be limited to the states that are <u>designated</u> in PCT-EP1 and where the eventual patent is validated (EPCa.64(1) and EPCa.65). In those states, you should file translations of the claims as published, if needed, to secure provisional protection (EPCr.67(3)).

As most states will not allow you to take action until Euro-PCT1 is granted (see Nat Law Table IIIA, column 2), you should request accelerated prosecution of Euro-PCT1 (C-VI, 1.12; OJ 2001, 459) and accelerated grant (EPCa.97(6)) to ensure quick grant.

In the meantime, you should provide Mr Bad with a copy of the claims to ensure that he cannot rely on any 'innocent infringer' defences.

In this way, it should be possible to stop Mr Bad marketing his panel in those states where Euro-PCT1 is designated and subsequently validated, including back-damages for his infringement of the claims as published in PCT1.

Can Mr Bad stop you from marketing the panels?

The only rights that Mr Bad can obtain to stop you are those he can obtain from EPB, as you say there are no equivalents elsewhere.

You say the claim in EPB is to a 'new structure for the superimposed parallel sheets'. Unless you are using this structure in your panels, then you will not be infringing EPB and Mr Bad will not be able to stop you on the basis of this claim.

There is the possibility of Mr Bad adding claims to EPB based on the examples showing panels with undulating walls. It is unlikely that Mr Bad would be able to generalise these examples to brad claims covering the undulating wall invention per se. This is because the examples are limited to panels with undulations of 10 U/m and 20 U/m, 2m and 4m respectively. It is not generally possible to base claims on isolated features (T 938/95, T1110/97 & T1067/97) (EPCa.123(2)).

Therefore, at best, Mr Bad may be able to obtain claims to the <u>specific</u> panels disclosed in EPB.

Whether these claims would be inventive in light of the disclosure of panels of 1 m with 20 U/m undulations in the Tokyo 2002 disclosure (which would be prior art in the same way as it is for PCT1) is debatavle, particularly as EPB gives no explanation of the undulations (EPCa.56).

I do <u>not</u> therefore think that Mr Bad will be able to stop you marketing your panels. At <u>best</u>, he may get narrow claims to the specific disclosed panels, but you would presumably be able to avoid these claims.

What is more of a problem for you is the prior art effect of the two embodiments in EPB, which I noted above were relevant to claims 3 and 4 of PCT1 as filed. Mr Bad has offered to "withdraw the conflicting embodiments for the three countries (DE, FR, IT)". However, this does not make sense, as there is no basis for doing this under the EPC. Perhaps he means not <u>pursue</u> EPC <u>at all</u> in these states, by not paying the designation fees (which should be due this month, March, i.e. 6 months from an estimates publication date (with search report for direct—EP with no priority claim) of October 2005 (EPCa.79(2) & EPCa.93(1)). Given that these are such important states, I doubt Mr Bad will want to do this. Moreover, as you are now intending to pursue Euro-PCT1 in <u>other</u> designated states, he would have to <u>not</u> pay designation fees for <u>all</u> these states to remove the prior art effect of EPB under EPCa.54(3) and (4) & EPCr.23(d).

If he is happy to do this, then good. However, a better approach would be to establish that the two embodiments in EPB with undulating walls <u>did</u> arise there as a result of Mr Ugly disclosing them in breach of confidence. This would remove EPB from the state of the art under EPCa.55(1)(a), as it would then have been published within 6 months before the filing date of PCT1 (i.e. October 2005 is <u>after</u> 01.10.2004). At the moment, there is little evidence that this is the case, and Mr Bad is right to say we would have difficulty proving this.

There certainly seems no point in bringing entitlement proceedings for this aspect of EPB (EPCa.60(1)), when you would only end up with the narrow subject matter disclosed above in the event (not at all guaranteed) that you were successful (EPCa.61(1)(a)-(c)).

As Mr Bad will need a licence to use the undulating walls in his panels, he may agree to provide a declaration (if true) that the embodiments <u>did</u> end up in EPB via Mr Ugly as part of the agreement, allowing you to submit this at the EPO to establish EPB as <u>not</u> prior art under EPCa.55(1)(a).

However, as the subject matter in EPB can be disclaimed from Euro-PCT anyway under G1/03 and G2/03 (explained above), the consequences of these embodiments remaining in the state of the art under EPCa.54(3) and (4).

Please do not hesitate to contact me if you like to discuss the above at all.

Yours sincerely,

A. Representative

A. REPRESENTATIVE

P.S. References to legal bases throughout this letter are for your information only.