

EUROPEAN QUALIFYING EXAMINATION 2006

PAPER D - PART II

This paper comprises:

- * Client's letter followed by five (5) questions 2006/DII/e/1 - 5

- * Annex: Calendars for 2005 and 2006 with indication of the days on which at least one of the EPO filing offices is not open for the receipt of documents 2006/DII/e/6 - 7

40% of the marks available for paper D are awarded for part I,
60% for part II.

Good NV

March 2006

Dear representative,

I wish to seek your advice on a number of issues which are set out below.

We are a Dutch company active in the field of building materials and have laboratories and manufacturing sites at various places in Europe. We manufacture and sell thermal solar panels.

Our panels are made of two superposed parallel sheets of plastic material held at a distance from each other by means of numerous straight parallel walls. The walls are perpendicular to the sheets and define ducts between the latter. At either end of the panel these ducts communicate with two transverse ducts: one for feeding the panel with water, the other for evacuating it. Solar rays heat the water passing through the panel. Such panels are well known.

We found that replacing the usual straight walls with undulating (i.e. wavy) ones increased the thermal efficiency of the panel. We filed a national patent application F1 in France on 1 October 2003, claiming solar panels with undulating walls and mentioning, as an example, a test panel one metre long with walls having seventeen undulations per metre. We also described and claimed an extrusion process by which the panel is produced by extruding molten plastic material with a vibrating extrusion nozzle.

We then found that with respect to the walls the number of undulations was highly significant. In our German laboratory we surprisingly found that, in order to obtain better results, the number of undulations had to be between five and sixteen undulations per metre length. We filed an application for a German utility model, D1, on 15 March 2004. It described and claimed panels having undulating walls and the improved range of five to sixteen undulations per metre. The embodiments described were all test panels one metre long. The claims were not limited to any size of panel. D1 was made publicly available on 15 September 2004.

Shortly after filing D1 we realised that we had limited ourselves too much. According to our Italian laboratory, said better results were obtained with walls having up to thirty undulations per metre. What really matters is the size of the panel: the number chosen should be up to sixteen for smaller sizes, i.e. for panels under three metres long, and between fifteen and thirty for larger sizes, i.e. for panels over three metres long. We filed a third application IT1 on 22 September 2004 describing these different ranges and having claims covering both the range from five to sixteen undulations per metre for smaller panels, and the range from fifteen to thirty undulations per metre for larger panels. We included examples clearly demonstrating this technical improvement over both claimed ranges for all integer values of undulations per metre.

We filed an international application, PCT1, on 1 October 2004 claiming the three priorities and containing all the information disclosed in the priority applications. All the inventors are our employees and have signed appropriate assignments for the PCT application and the relevant priorities. PCT1 has the following claims:

claim 1 directed to solar panels having undulating walls,

claim 2 to solar panels having undulating walls with 5-16 undulations/metre,

claim 3 to solar panels having undulating walls with 5-16 undulations/metre and <3m length,

claim 4 to solar panels having undulating walls with 15-30 undulations/metre and >3m length,

claim 5 directed to the extrusion process.

The only document dealing with this type of solar panel that we know is an article that we found in "The Proceedings of the 2002 Tokyo Symposium on Solar Panels". The symposium was held in 2002, but the proceedings of the symposium were not published until May 2004. The article mentions the use of undulating walls to mechanically strengthen the panels. It mentions only one example, a panel one metre long with walls having twenty undulations per metre. No other disclosure appears to have been made.

Thus everything was in order until we discovered the publication of a European patent application EPB that was filed shortly after D1 in April 2004. It claims a new structure for the superposed parallel sheets of a solar panel. However, it describes two examples of solar panels, with undulating walls. The two examples have ten and twenty undulations per metre respectively, the first being two metres long and the second four metres long. No explanation is given for the undulations. It appears that EPB was filed by our competitor, Mr Bad. I am of the opinion that he received the information from our research manager, Mr Ugly, himself. Mr Ugly left our company suddenly two years ago. I conducted some investigations and learned that Mr Bad presented a panel having walls with undulations at a trade fair on the Costa del Sol in Spain in October 2005. He is offering panels of all sizes. We have located no other disclosure of Mr Bad's panels or any applications equivalent to EPB elsewhere. We entered the EP phase of PCT1 immediately (Euro-PCT1), in November 2005, and designated DE, FR and IT to cover our market.

At a meeting recently, I took the opportunity to tell Mr Bad what I thought of his behaviour. He admitted nothing, suggesting that it will be difficult for us to prove anything. He said he was willing to maintain our good relations and was ready to withdraw the conflicting embodiments in application EPB for the three countries (DE, FR and IT) that were designated in our application.

I am not sure whether to accept this offer, as we envisage good sales throughout Europe. I should now like to cover other European countries, particularly as Mr Bad has now launched two types of panel with undulating walls (one with ten undulations per metre, the other with twenty undulations per metre) in the United Kingdom and Belgium.

We are still working on the launch of our product and know that it will soon be time to enter the national phases for PCT1 in other countries outside Europe. As we have interested investors, but do not expect decisions before June, I would not like to pay the patent costs for nothing if the decisions prove negative.

Are each of claims 1 to 5 valid in Euro-PCT1, and if not, can we improve them?

Can we extend our Euro-PCT1 to cover the United Kingdom and Belgium?

Is there an easy way to postpone national phase entry for PCT1 outside Europe without paying surcharges?

Can we stop Mr Bad from marketing his panels?

Can Mr Bad stop us from marketing our panels?

2005

INFORMATION FROM THE EUROPEAN PATENT OFFICE

Notice from the President of the European Patent Office dated 02 July 2004 concerning the days on which EPO filing offices are closed in 2005

1. Under Rule 85(1) EPC time limits expiring on a day on which at least **one** of the filing offices of the EPO is not open for receipt of documents (closing days) are extended until the first day thereafter on which **all** the filing offices are open for receipt of documents and on which ordinary mail is delivered.

2. The EPO's filing offices in Munich, The Hague and Berlin will be closed for the receipt of documents on every Saturday and Sunday. The other closing days in 2005 are listed below.

| | | |
|--|--|--|
| <p>JANUARY</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30 31</p> | <p>FEBRUARY</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28</p> | <p>MARCH</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30 31</p> |
| <p>APRIL</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28 29 30</p> | <p>MAY</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6 7</p> <p>8 9 10 11 12 13 14</p> <p>15 16 17 18 19 20 21</p> <p>22 23 24 25 26 27 28</p> <p>29 30 31</p> | <p>JUNE</p> <p>S M T W T F S</p> <p>1 2 3 4</p> <p>5 6 7 8 9 10 11</p> <p>12 13 14 15 16 17 18</p> <p>19 20 21 22 23 24 25</p> <p>26 27 28 29 30</p> |
| <p>JULY</p> <p>S M T W T F S</p> <p>1 2</p> <p>3 4 5 6 7 8 9</p> <p>10 11 12 13 14 15 16</p> <p>17 18 19 20 21 22 23</p> <p>24 25 26 27 28 29 30</p> <p>31</p> | <p>AUGUST</p> <p>S M T W T F S</p> <p>1 2 3 4 5 6</p> <p>7 8 9 10 11 12 13</p> <p>14 15 16 17 18 19 20</p> <p>21 22 23 24 25 26 27</p> <p>28 29 30 31</p> | <p>SEPTEMBER</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30</p> |
| <p>OCTOBER</p> <p>S M T W T F S</p> <p>1</p> <p>2 3 4 5 6 7 8</p> <p>9 10 11 12 13 14 15</p> <p>16 17 18 19 20 21 22</p> <p>23 24 25 26 27 28 29</p> <p>30 31</p> | <p>NOVEMBER</p> <p>S M T W T F S</p> <p>1 2 3 4 5</p> <p>6 7 8 9 10 11 12</p> <p>13 14 15 16 17 18 19</p> <p>20 21 22 23 24 25 26</p> <p>27 28 29 30</p> | <p>DECEMBER</p> <p>S M T W T F S</p> <p>1 2 3</p> <p>4 5 6 7 8 9 10</p> <p>11 12 13 14 15 16 17</p> <p>18 19 20 21 22 23 24</p> <p>25 26 27 28 29 30 31</p> |

| Tage/Days/Jours 2005 | | München Munich | Den Haag The Hague La Haye | Berlin |
|--|----------|-------------------|----------------------------------|--------|
| Heilige Drei Könige - Epiphany - Epiphanie | 06.01.05 | x | | |
| Karfreitag - Good Friday - Vendredi Saint | 25.03.05 | x | x | x |
| Ostermontag - Easter Monday - Lundi de Pâques | 28.03.05 | x | x | x |
| Christi Himmelfahrt - Ascension Day - Ascension | 05.05.05 | x | x | x |
| Pfingstmontag - Whit Monday - Lundi de Pentecôte | 16.05.05 | x | x | x |
| Fronleichnam - Corpus Christi - Fête-Dieu | 26.05.05 | x | | |
| Mariä Himmelfahrt - Assumption Day - Assomption | 15.08.05 | x | | |
| Tag der Deutschen Einheit - Day of German Unity - Fête Nationale | 03.10.05 | x | | x |
| Allerheiligen - All Saints' Day - Toussaint | 01.11.05 | x | | |
| 2. Weihnachtstag - Boxing Day - Lendemain de Noël | 26.12.05 | x | x | x |

2006

INFORMATION FROM THE EUROPEAN PATENT OFFICE

Notice from the President of the European Patent Office dated 14 October 2005 concerning the days on which EPO filing offices are closed in 2006

1. Under Rule 85(1) EPC time limits expiring on a day on which at least **one** of the filing offices of the EPO is not open for receipt of documents (closing days) are extended until the first day thereafter on which **all** the filing offices are open for receipt of documents and on which ordinary mail is delivered.

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|--|----------|-------------------|----------------------------------|--------|
| Heilige Drei Könige - Epiphany - Epiphanie | 06.01.06 | x | | |
| Karfreitag - Good Friday - Vendredi Saint | 14.04.06 | x | x | x |
| Ostermontag - Easter Monday - Lundi de Pâques | 17.04.06 | x | x | x |
| Maifeiertag - May Day - Fête du Travail | 01.05.06 | x | x | x |
| Nationalfeiertag - National Holiday - Fête Nationale | 05.05.06 | | x | |
| Christi Himmelfahrt - Ascension Day - Ascension | 25.05.06 | x | x | x |
| Pfingstmontag - Whit Monday - Lundi de Pentecôte | 05.06.06 | x | x | x |
| Fronleichnam - Corpus Christi - Fête-Dieu | 15.06.06 | x | | |
| Mariä Himmelfahrt - Assumption Day - Assomption | 15.08.06 | x | | |
| Tag der Deutschen Einheit - Day of German Unity - Fête Nationale | 03.10.06 | x | | x |
| Allerheiligen - All Saints' Day - Toussaint | 01.11.06 | x | | |
| 1. Weihnachtstag - Christmas Day - Noël | 25.12.06 | x | x | x |
| 2. Weihnachtstag - Boxing Day - Lendemain de Noël | 26.12.06 | x | x | x |