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(54) Title: RADIANT HEATING ELEMENT AND PANEL

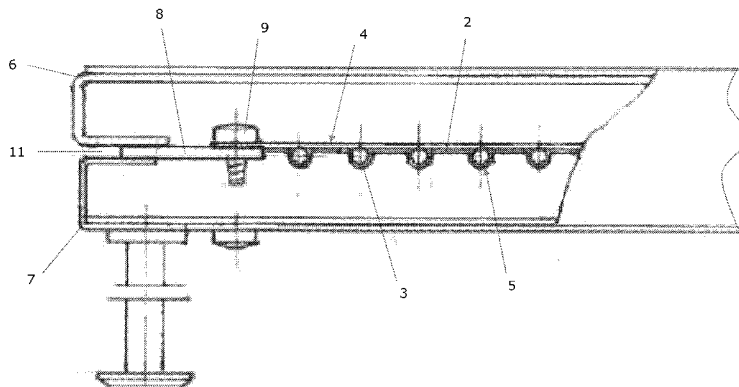


FIG. 2

(57) Abstract: The present invention concerns a radiant heating element (2) and a panel heater (1) that emits its heat as radiant heat based on a radiant heating element (2) having a front side or face with a high emission coefficient (approx. 0.8) which emits considerable radiant heat, and a rear side or face with a low emission coefficient (approx. 0.05) which emits little radiant heat; and that the front side or face of the panel (1) is protected by a grid (6) that has about 65-68% of its surface open perpendicularly to the radiant heating element (2); and that the rear side or face of the radiant heating element (2) is covered by a rear plate (7) which may be of polished stainless steel. The grid (6) and the rear plate (7) cover all side edges and also form the gap or interstice (11) where the fastening(s) (8) for fixing the radiant heating element (2) is(are) arranged and fastened. The radiant heating element (2) has therefore no contact with the grid (6) and the rear plate (7), and can freely expand in one plane, while being locked in the other plane. The radiant heating element (2) has a small mass and has therefore a short warming up time so that the panel heater (1) reaches working temperature quickly. The invention makes it possible to manufacture panel heaters that provide desired heat supply where and when the user requires it. The salient feature of the invention is that approx. 98% of the radiant heat is emitted in the desired direction, and only approx. 2% backwards towards areas that are not required to be heated. This effect is achieved without use of thermal insulation

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B. FIELDS SEARCHED				
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPODOC, WPI, FULDTEKST: ENGELSK, TYSK, FRANSK				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A	NO328736 WESSELTOFT INNOVATION AS 2009.11.23	1 - 21		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 50%; vertical-align: top;"> <p>“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>“&amp;” document member of the same patent family</p> </td> </tr> </table>			<p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>“&amp;” document member of the same patent family</p>
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Name and mailing address of the ISA Nordic Patent Institute Helgeshøj Allé 81 DK - 2630 Taastrup, Denmark. Facsimile No. + 45 43 50 80 08	Authorized officer  Joachim Frydenlund Telephone No. +47 22 38 74 30			

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Information on patent family members

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Patent document cited in search report / Publication date	Patent family member(s) / Publication date
NO328736	2009.11.23 NONE