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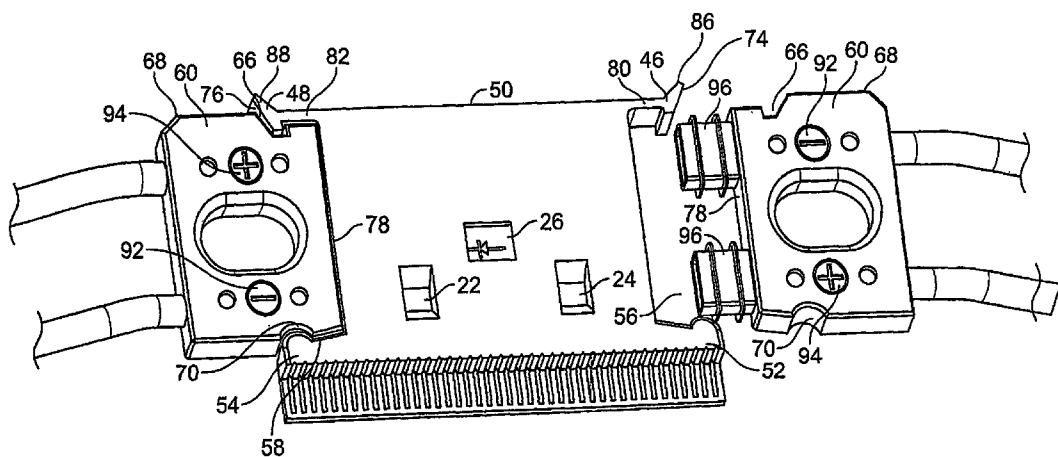
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- (81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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(54) **Title:** CONNECTOR SYSTEM FOR SOLAR CELL ROOFING TILES



(57) **Abstract:** A connector system (10) for photovoltaic roof tiles has a body (12) and a plug assembly (14) with latching means. The body portion (12) has a latching member (46, 48) and a rib (52, 54) defining a recess (56, 58) for mating with the plug assembly (14). A pair of cavities extends inwardly from the recess (56, 58). The latching member (46, 48) has a projection, and integral conductors are formed within the body portion (12). The plug assembly (14) has an indentation (66) for retentively receiving the projection, and an indentation (70) for receiving the rib (52, 54). A pair of protrusions (96) extends from a peripheral end of the plug assembly (14) and receives a cable terminal of the plug assembly (14). The protrusions (96) engage with and seal off the cavities to form an electrically conductive path with the cable terminals when the body and the plug mate. The latching projection retentively engages the plug. The plug assembly (14) disengages by manipulation of the latching member projection member.

WO 2008/085507 A3

**INTERNATIONAL SEARCH REPORT**

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<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  INV. H01L31/05 H01R13/627                  ADD. H01R13/52</p> <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>										
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)  <b>HOIL HOIR</b></p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  <b>EPO-Internal , WPI Data</b></p>										
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>                     UO 98/25325 A (ATLANTIS SOLAR SYSTEME AG [CH]; DUETSCH BEAT [CH])                      11 June 1998 (1998-06-11)                      page 3, line 8 - page 8, line 8                      figures 1-5                 </td> <td>1-10</td> </tr> <tr> <td>A</td> <td>                     POSNANSKY M ET AL: "SUNSLATES - A NOVEL PV-ROOFING AND FACADE SYSTEM. KEY TO THE LARGE SCALE UTILIZATION OF SOLAR ENERGY" COMMISSION OF THE EUROPEAN COMMUNITIES. E.C. PHOTOVOLTAICSOLAR ENERGY CONFERENCE. PROCEEDINGS OF THE INTERNATIONAL CONFERENCE, KLUWER ACADEMIC PUBLISHERS, DORDRECHT, NL, vol. 2, 30 June 1997 (1997-06-30), pages 1922-1924, XP002054120 paragraphs 3.2 and 3.4; figure 5                      -----                      -/--                 </td> <td>1-10</td> </tr> </tbody> </table>		Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	A	UO 98/25325 A (ATLANTIS SOLAR SYSTEME AG [CH]; DUETSCH BEAT [CH]) 11 June 1998 (1998-06-11) page 3, line 8 - page 8, line 8 figures 1-5	1-10	A	POSNANSKY M ET AL: "SUNSLATES - A NOVEL PV-ROOFING AND FACADE SYSTEM. KEY TO THE LARGE SCALE UTILIZATION OF SOLAR ENERGY" COMMISSION OF THE EUROPEAN COMMUNITIES. E.C. PHOTOVOLTAICSOLAR ENERGY CONFERENCE. PROCEEDINGS OF THE INTERNATIONAL CONFERENCE, KLUWER ACADEMIC PUBLISHERS, DORDRECHT, NL, vol. 2, 30 June 1997 (1997-06-30), pages 1922-1924, XP002054120 paragraphs 3.2 and 3.4; figure 5 ----- -/--	1-10
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<p><input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.      <input checked="" type="checkbox"/> See patent family annex.</p>										
<p>* Special categories of cited documents :</p> <table border="0"> <tr> <td style="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 document but published on or after the international filing date</p> <p>'L<sup>1</sup>' 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="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 document but published on or after the international filing date</p> <p>'L<sup>1</sup>' 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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<p>Date of the actual completion of the International search</p> <p align="center"><b>15 July 2008</b></p>	<p>Date of mailing of the International search report</p> <p align="center">30/07/2008</p>									
<p>Name and mailing address of the ISA/                  European Patent Office, P.B 581B Palentlaan 2                  NL - 2280 HV Rijswijk                  Tel. (+31-70) 340-2040 Tx. 31 651 epo nl,                  Fax: (+31-70) 340-3016</p>	<p>Authorized officer</p> <p align="center">Ledoux, Serge</p>									

# INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2006 147189 A (SUMITOMO WIRING SYSTEMS) 8 June 2006 (2006-06-08) abstract; figures 1-17	1-10
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Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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