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(54) Title: COATED ARTICLE WITH LOW-E COATING INCLUDING IR REFLECTING LAYER(S) AND CORRESPONDING METHOD

(57) Abstract: A coated article is provided that may be heat treated in certain example embodiments. A coating of the coated article includes a zinc oxide inclusive layer located over and contacting a contact layer that is in contact with an infrared (IR) reflecting layer of a material such as silver. It has been found that the use of such a zinc oxide inclusive layer results in improved thermal stability upon heat treatment, increased visible transmission, and/or lower sheet resistance (R_S).



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/05656

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| A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B32B 15/04, 15/00 US CL : 428/627, 632, 667, 635 According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 428/627, 632, 667, 635, 426, 428, 432, 446, 448, 457, 469, 472, 689, 697, 698, 699, 701, 702, 704 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Please See Continuation Sheet | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | US 5,53,054 A (DEPAUW et al.) 06 October 1992(06.10.1992), see entire document. | 34 |
| --- | | ----- |
| Y | | 1, 3-7, 9-15,2, 16-22 and 24-34 |
| Y | US 5,837,361 A (GLASER et al.) 17 November 1998(17.11.1998), see entire document. | 1-7, 9-22 and 24-34 |
| Y | US 6,316,110 B1 (ANZAKI et al) 13 November 2001(13.11.2001), see entire document. | 2 and 16 |
| Y | US 6,398,925 B1 (ARBAB et al) 04 June 2002(04.06.2002), see entire document. | 2 and 16 |
| Y | US 5,557,462 A (HARTIG et al.) 17 September 1996(17.09.1996), see entire document. | 1, 3-5, 9-15, 17-20 and 24-34 |
| Y | US 5,718,980 A (KOCH et al.) 17 February 1998(17.02.1998), see entire document. | 6-7 and 21-22 |
| Y | US 6,336,999 B1 (LEMMER et al.) 08 January 2002(08.01.2002), see entire document. | 1, 3-5, 9-11,15, 17-20, 24-26, 30, 32 and 34 |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex. | | |
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| "P" document published prior to the international filing date but later than the priority date claimed | | |
| Date of the actual completion of the international search 07 November 2005 (07.11.2005) | Date of mailing of the international search report 20 DEC 2005 | |
| Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230 | Authorized officer <i>Marianne Seidel</i> Marianne Seidel Telephone No. (571) 272.1600 | |

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

East: oxide or dioxide with same or silver and glass (anton same dietrich) and aluminum and glass and (corrosion or oxidation) and glass (stainless steel) with nichrome with silver, titanium (corrosion or oxidation) and glass and (antireflect) zinc (dioxide or oxide).