

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/019585 A3

- (51) International Patent Classification⁷: E04C 1/42
- (21) International Application Number: PCT/US2004/027276
- (22) International Filing Date: 23 August 2004 (23.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
10/645,984 22 August 2003 (22.08.2003) US
- (71) Applicant and
- (72) Inventor: WIRAWAN, Margaretha, H. [IN/US]; 3333 Palos Verdes Drive West, Rancho Palos Verdes, California 90275 (US).
- (74) Agent: ALTMAN, Daniel, E.; 2040 Main Street, Fourteenth Floor, Irvine, California 92614 (US).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

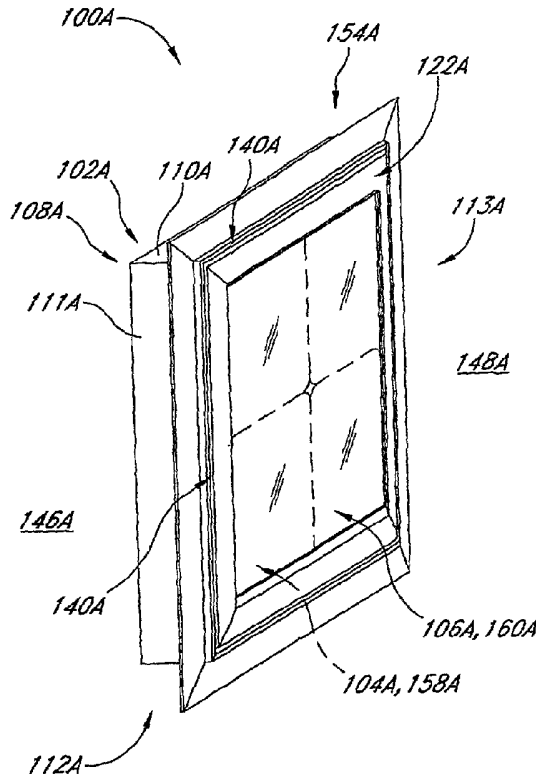
— of inventorship (Rule 4.17(iv))

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: WINDOW ASSEMBLY



(57) Abstract: A window assembly comprises a window frame. A non-specular window panel assembly is supported by the window frame, and can comprise of a plurality of glass blocks joined together. A low-emissivity window panel assembly is juxtaposed to the non-specular window panel assembly. The window frame supports the low-emissivity window panel assembly.



WO 2005/019585 A3



-
- (88) **Date of publication of the international search report:** 6 April 2006 *For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*
- (15) **Information about Correction:**
Previous Correction:
see PCT Gazette No. 19/2005 of 12 May 2005

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/27276

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : E04C 1/42
US CL : 52/204.593, 204.595, 172, 202, 306, 307, 308, 786.1, 786.11; 428/34
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. : 52/204.593, 204.595, 172, 202, 306, 307, 308, 786.1, 786.11; 428/34

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)
BRS terms: glass block, window, emissivity

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,418,021A (KIM) 23 May 1995 (23.05.1993), entire document.	9, 11, 12, 14
---		-----
Y		13
Y	US 4,883,721 (NALEPKA et al) 28 November 1989 (28.11.1989), entire document.	13

Further documents are listed in the continuation of Box C. See patent family annex.

Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search 22 December 2005 (22.12.2005)	Date of mailing of the international search report 01 FEB 2006
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. (571) 273-3201	Authorized officer <i>D. Wildermuth for</i> Naoko Slack Telephone No. (571) 272-6848