

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number  
**WO 2004/051045 A1**

(51) International Patent Classification<sup>7</sup>: **E06B 3/663**

(21) International Application Number:  
PCT/CA2002/001889

(22) International Filing Date: 5 December 2002 (05.12.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **VISION-WALL CORPORATION** [CA/CA]; 17915 - 118 Avenue, Edmonton, Alberta T5S 1L6 (CA).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WINFIELD, Alan, H.** [CA/CA]; c/o 17915 - 118 Avenue, Edmonton, Alberta T5S 1L6 (CA).

(74) Agent: **BENNETT JONES LLP**; 1000 Atco Centre, 10035 - 105 Street, Edmonton, Alberta T5J 3T2 (CA).

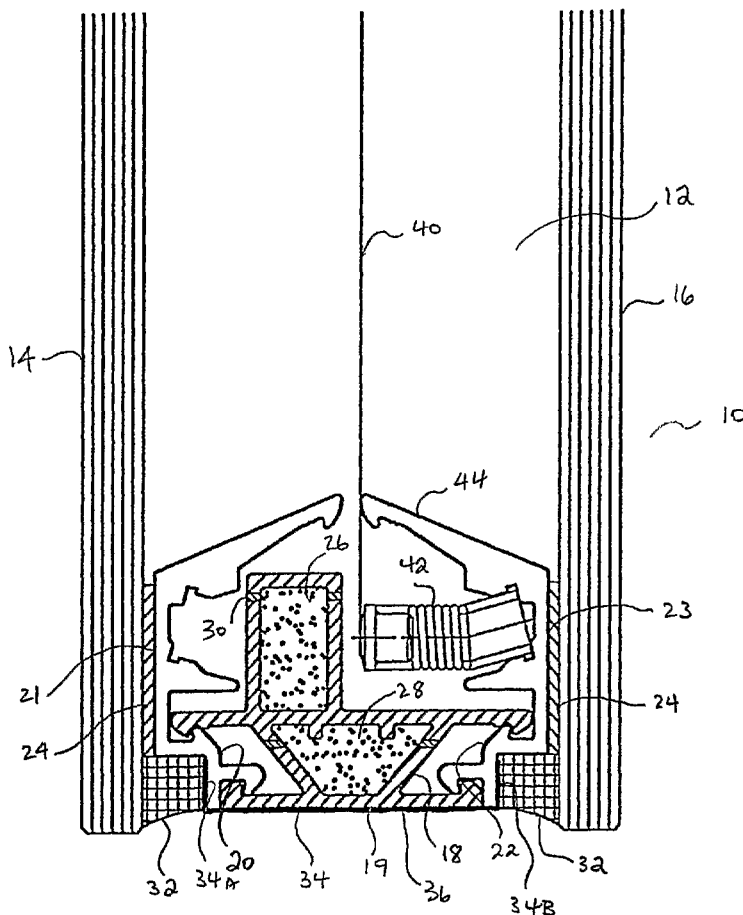
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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

**Published:**  
— with international search report

[Continued on next page]

(54) Title: SEALING SYSTEM FOR AN ENERGY EFFICIENT WINDOW



(57) Abstract: A heat insulation window includes a pair of outer panes (14, 16) defining an interior air space (12) and held apart by a spacing member which as opposed and parallel first and second outer surfaces. A third outer surface extends between the first (21) and second (23) outer surfaces. The spacing member defines a first sealing groove (32) at the junction between the first (21) and third (19) outer surfaces and a second sealing groove (32) at the junction between the second (23) and third (19) outer surfaces. The sealing grooves (32) are filled with a gas-tight seal element. A metal band (34) overlays the third (19) outer surface and has edge flanges (34A, 34B) which fit into the first and second sealing grooves (32), isolating the third (19) outer surface from the seal element.

WO 2004/051045 A1



---

*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.*