

(19) World Intellectual Property
Organization
International Bureau



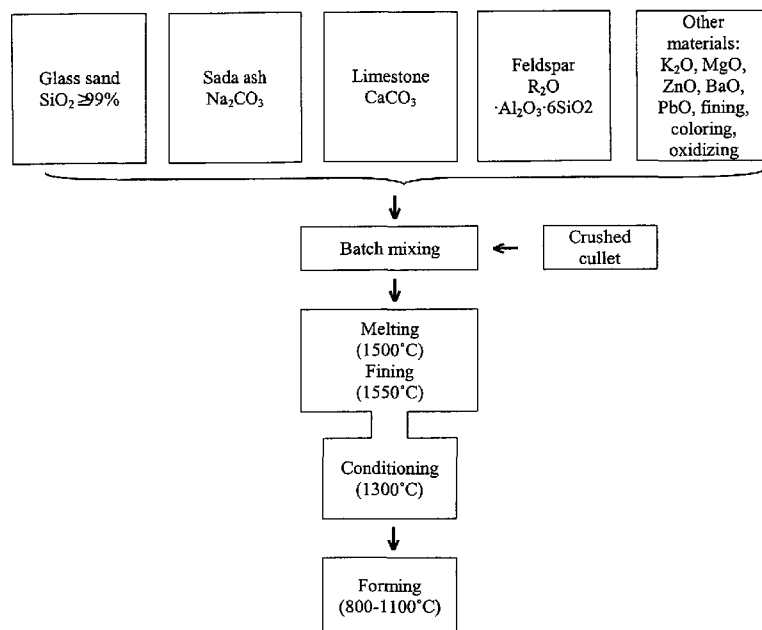
(43) International Publication Date
11 March 2004 (11.03.2004)

PCT

(10) International Publication Number
WO 2004/020351 A1

- (51) International Patent Classification⁷: **C03B 3/02**, (72) Inventor: MURNANE, Rand, A; 12 Woodland Drive, Big Flats, NY 14814 (US).
C03C 3/085
- (21) International Application Number: PCT/US2003/024478 (74) Agent: BEALL, Thomas, R; Corning Incorporated, SP TI 3 1, Corning, NY 14831 (US).
- (22) International Filing Date: 5 August 2003 (05.08.2003) (81) Designated States (*national*): CN, JP, KR, SG.
- (25) Filing Language: English (84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR).
- (26) Publication Language: English
- (30) Priority Data: 10/232,257 29 August 2002 (29.08.2002) US
Published:
— with international search report
- (71) Applicant: CORNING INCORPORATED [US/US]; 1 Riverfront Plaza, Corning, NY 14831 (US).
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.

(54) Title: PRODUCING GLASS USING OUTGASSED FRIT



(57) Abstract: Disclosed is a process of producing glass materials wherein outgassing materials are mixed, melted, outgassed and formed into frits, and the frits are then mixed with essentially non-outgassing materials and melted to form the glass. Because the frits are already outgassed, less gas is generated in the final glass melting step, thus foaming and scum forming are reduced. As a result, heat transfer efficiency in the glass furnace is improved and lower melting temperature is achieved. The process can be carried out in any type of glass furnaces and is particularly suitable for high silica glass compositions