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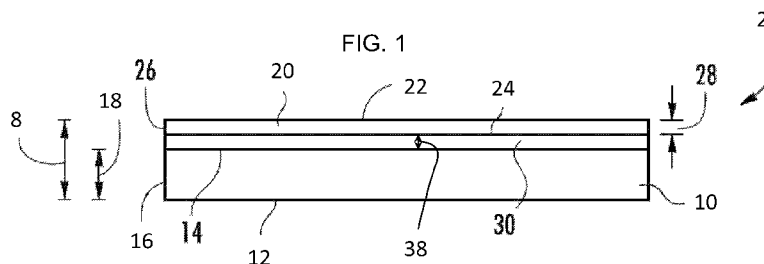
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(71) Applicant: CORNING INCORPORATED [US/US]; 1
Riverfront Plaza, Corning, New York 14831 (US).(72) Inventors: ADIB, Kaveh; 235 Upper Delevan Avenue,
Corning, New York 14830 (US). BELLMAN, Robert
Alan; 108 Weston Lane, Painted Post, New York 14870
(US). BOOKBINDER, Dana Craig; 2675 Davis Road,
Corning, New York 14830 (US). CHANG, Theresa; 21
Katie Lane, Painted Post, New York 14870 (US). LIU,
Shiwen; 16 Woodland Way, Painted Post, New York
14870 (US). MANLEY, Robert George; 29 West Hill
Rd., Vestal, New York 13850 (US). MAZUMDER,
Prantik; 316 East Falls Street, Ithaca, New York 14850
(US).(74) Agent: SCHMIDT, Jeffrey A; Corning Incorporated, In-
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(54) Title: ARTICLES AND METHODS FOR CONTROLLED BONDING OF THIN SHEETS WITH CARRIERS



(57) **Abstract:** A method of controllably bonding a thin sheet having a thin sheet bonding surface with a carrier having a carrier bonding surface, by depositing a carbonaceous surface modification layer onto at least one of the thin sheet bonding surface and the carrier bonding surface, incorporating polar groups with the surface modification layer, and then bonding the thin sheet bonding surface to the carrier bonding surface via the surface modification layer. The surface modification layer may include a bulk carbonaceous layer having a first polar group concentration and a surface layer having a second polar group concentration, wherein the second polar group concentration is higher than the first polar group concentration. The surface modification layer deposition and the treatment thereof may be performed by plasma polymerization techniques.