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(21) International Application Number: PCT/US95/09703 (22) International Filing Date: 8 August 1995 (03.08.95) (30) Priority Data: 08/287,392 8 August 1994 (08.08.94) US (71) Applicant: USG INTERIORS, INC. [US/US]; 125 South Franklin Street, Chicago, IL 60606-4678 (US). (72) Inventor: BAIG, Mirza, A.; 9415 Meadow Lane, Des Plaines, IL 60016 (US). (74) Agent: KEEFER, Timothy, J.; Ladas & Parry, 224 South Michigan Avenue, Chicago, IL 60604 (US).		(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG). Published <i>With international search report.</i>
(54) Title: A GYPSUM/CELLULOSIC FIBER ACOUSTICAL TILE COMPOSITION (57) Abstract An acoustical tile composition based on a gypsum/cellulosic fiber composition which can replace all or a portion of the mineral wool normally present in acoustical ceiling tiles. The gypsum/cellulosic fiber composition is combined with a lightweight aggregate material and a binder to form a composition which is used in a water-felting process to manufacture acoustical ceiling tiles and panels. The preferred source of the cellulosic fiber is a composite gypsum/cellulose fiber material which is prepared by mixing the gypsum and cellulosic fiber material with sufficient water to form a dilute slurry which is then heated under pressure to calcine the gypsum, converting it to an alpha calcium sulfate hemihydrate. The resulting composite material comprises cellulosic fibers physically interlocked with calcium sulfate crystals. Another source of both gypsum and cellulosic fibers is waste (scrap) gypsum wallboard. Expanded perlite is the preferred lightweight aggregate material.		

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