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United States Patent [19]

Patel

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[54] **READY MIXED SETTING-TYPE JOINT COMPOUND, AND METHOD OF MAKING SAME**

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[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No. 5,653,797.

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Related U.S. Application Data

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[51] **Int. Cl.**[6] **C04B 11/00**

[52] **U.S. Cl.** **106/781**; 106/778; 106/783; 52/741.4; 524/5

[58] **Field of Search** 106/781, 778, 106/783; 52/741.4; 524/5

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[57] **ABSTRACT**

A process for the production of a ready-mixed setting-type joint compound includes the use of calcium sulfate hemihydrate, water, and a set-retarding agent. The retarder includes a polymer composition including acrylic acid and acrylamide monomer units, for example a copolymer (or a mixture of copolymers) of acrylic acid and acrylamide or a blend of a homopolymer of acrylic acid and a homopolymer of acrylamide. The joint compound can be combined with an accelerator including a metallic salt. The joint compound of the invention can be formulated either as a lightweight joint compound or as a conventional weight joint compound. The joint compounds provide short setting times, reduced shrinkage, reduced preparation time, and beneficial application properties.

21 Claims, No Drawings