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(71) Applicant: **CERTAINTED GYPSUM, INC.** [US/US];
20 Moores Road, Malvern, PA 19355 (US).

(72) Inventors: **AMATO, Dahlia**; 516 Cliff Lane, Malvern, PA 19355 (US). **LESPIAT, Remi**; 46 Lakeside Avenue, Devon, PA 19333 (US). **REID, William**; 2208 Ridge Ave., Apt. 2, Philadelphia, PA 19121 (US).

(74) Agent: **SUGGS, James, V.**; McDonnell Boehnen Hulbert & Berghoff LLP, 300 South Wacker Drive, Chicago, IL 60606 (US).

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(54) Title: FIRE-RESISTANT GYPSUM BOARDS AND METHODS FOR MAKING THEM

(57) Abstract: The present disclosure relates generally to a method of producing a fire-resistant gypsum board comprising a gypsum core, the method comprising providing a calcium sulfate slurry comprising a silicone oil having a hydride content of no more than 0.01 equivalents of Si-H per equivalent of silicon in an amount of 0.5 to 1.5 wt% of the mass of the gypsum core; allowing the calcium sulfate slurry to set; and drying the set gypsum material to provide the gypsum core. The disclosure also relates to a fire-resistant gypsum board comprising a gypsum core that shrinks by less than 6% by volume when heated to 850 °C, wherein the gypsum core comprises a silicone oil having a hydride content of no more than 0.01 equivalents of Si-H per equivalent of silicon, present in an amount in the range of 0.05 to 1.5 wt% based on the mass of the gypsum core.



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