5725652

LIGHTWEIGHT, LOW WATER CONTENT EXPANDED SHALE, CLAY AND SLATE CEMENTITIOUS COMPOSITIONS AND METHODS OF THEIR PRODUCTION AND USE

Shulman David
Littleton, CO, USA

An improved lightweight cementitious product made up of an aqueous cementious mixture using cement and expanded shale, clay and slate mix, that can incorporate fly ash, lime, and the weight saving component, which is micronized polystyrene particles having particle sizes in the range of 50–2000 m, and characterized by having water contents in the range of about 0.5–50% v/v. The ultra low water compositions can be extruded and can be molded under high pressure.

5733367

CEMENT COMPOSITION

Soeda Koich, Hosono Katsuo, Hayashi Hirosh, Yamada Kazuo, Matsuhisa Makoto, Ashiyahara Satoru, Maeda Hirokazu, Furuta Hitoshi, Hattori Mitsuo Sakuri
JAPAN
assigned to Fuji Oil Company Limited

A cement composition comprising a cement base and hemicellulose. The cement composition produces reduced efflorescence and less bleeding. Self-leveling materials containing the cement composition also produce reduced efflorescence and less bleeding and exhibit improved surface adhesion strength.

5735947

CEMENT WITH AIR-COOLED SLAG AND SILICA FUME

Hopkins Donald Stephen; Oates David Bridson
Thornhill, CANADA
assigned to Lafarge Canada Inc

A cement mix based on an inorganic hydraulic cement, for example, Portland Cement, an air-cooled blast furnace slag and silica fume produces concretes having strength characteristics superior to those achieved by the cement alone; furthermore, this cement mix is superior to a corresponding mix based on the inorganic hydraulic cement, and the air-cooled slag without the silica fume, and to a corresponding mix based on the cement and silica fume without the slag; additionally a cost saving in the expensive Portland Cement is achieved by use of the air-cooled slag which is a waste material and cheaper than granulated or pelletized slag.

5736594

CEMENTING COMPOSITIONS AND METHODS USING RECYCLED EXPANDED POLYSTYRENE

Boles Joel, Boles Jeffrey B
Spring, TX, USA
assigned to B J Services Company

A novel and environmentally friendly well cementing composition comprising hydraulic cement and ground-up recycled expanded polystyrene having a low density, good compressive strength, good thermal conductivity, and the ability to float, and methods for cementing well bores with said cementing composition.

5741357

HYDRATED HIGH ALUMINA CEMENT

Sheikh Shamim A
Willowdale, Ontario, CANADA

A hydraulic cement composition is disclosed which utilizes as part of an expansive component novel coated particles of high alumina cement. The particles have a core of substantially unhydrated high alumina cement and an outer layer of hydration products of the core, which outer layer delays the reaction of the particles with other materials in the composition. By varying the nature and relative amounts of the coated particles the amount the cement composition may expand and the setting time of the cement may be varied. The coated particles may be formed by partial hydration, drying and grinding of a mixture of high alumina cement powder alone with water.