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(54) Title: A THERMOMECHANICAL PROCESS FOR RECYCLING PLASTIC WASTE, FLEXIBLE LAMINATED PACKAGING WASTE, AND MINERAL AGGREGATES INTO ECO-FRIENDLY BUILDING MATERIALS

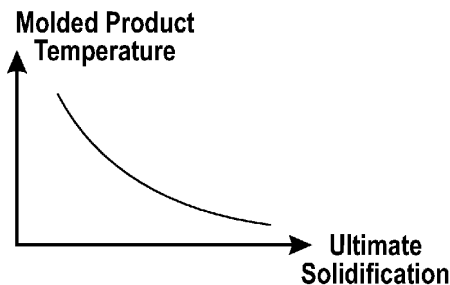


FIG. 4

(57) Abstract: The present invention discloses a complete thermomechanical process for recycling and treating plastic waste, flexible laminated packaging waste, and mineral aggregates. The process includes a pre-processing, a processing stage and a post-processing stage. The present invention provides products that have better mechanical specifications than concrete for example: lighter, stronger, better resistant to abrasion, better resistant to water absorption, better noise and heat insulation, and better visual appearance as the present invention produces building materials in all colors and shapes. The present invention further provides various building materials such as paving tile types, roofing tiles, building bricks, cladding sheets, structural beams, and other products that are traditionally made from composite materials and/or concrete.

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