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Dharia

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(54) **JUST-IN-TIME BULK RUBBER BALE PROCESSOR**

(76) Inventor: **Amitkumar N. Dharia**, P.O. Box 2466, Coppell, TX (US) 75019

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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Primary Examiner—Boyer D. Ashley
(74) *Attorney, Agent, or Firm*—Dennis T. Griggs

(57) **ABSTRACT**

A bale processor for cutting or dicing a bale or slab of unvulcanized rubber produces small cubes or blocks of a predetermined size and uniform shape for continuous feeding at a predetermined rate into a mixing machine or blender. A bale or slab of feedstock rubber is advanced incrementally along a slider platform and a segment is sliced from the leading end of the bale. After separation, the segment falls onto a receiving panel from which it is transferred by a vacuum pick-up head to a vacuum hold-down table. Multiple slices are then formed through the segment along the X-axis by circular cutting blades of an X-axis cutter head, thereby forming elongated segment strips. Next, multiple slices are formed through the segment strips in the Y-direction by a Y-axis cutter head which includes circular cutter blades that are extendable and retractable along the Y-axis. The bulk slab or bale is thus reduced to multiple cubes of predetermined length, height and width dimensions as established by the dimension of the initial segment slice and by the spacing of the circular cutting blades of the X-cutter head and the Y-cutter head, respectively.

13 Claims, 7 Drawing Sheets

