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Bravin

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(54) **AUTOMATIC TAPE CROSSOVER**

(75) Inventor: **Ben Bravin**, Los Angeles, CA (US)

(73) Assignee: **Dynamex Corporation**, Carson, CA (US)

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(58) **Field of Search** 242/552, 554.2, 242/555.1; 156/502, 504

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Primary Examiner—John M. Jillions
(74) *Attorney, Agent, or Firm*—Blakely Sokoloff Taylor & Zafman LLP

(57) **ABSTRACT**

An automatic tape crossover machine having two feeding mechanisms to supply running and new tapes, respectively. A powered cutter is provided through which the running tape is to pass and be cut in response to a cut signal, where the cutter is positioned downstream of the first tape feeding mechanism. The machine also includes a joining mechanism at which a portion of a new tape is to be joined to the running tape in response to a join signal. Control circuitry automatically determines whether a tape exhaustion condition has been reached and asserts the join and cut signals to join the running and new tapes and to cut the running tape, before the tape feeding mechanism is emptied of the running tape. The machine thus allows the automatic transition from the running tape to the new tape, i.e. without requiring the presence or manual assistance of a human operator when joining the two tapes. In addition, the process line speed need not be altered for the crossover, thereby reducing the probability of inconsistencies in product quality.

28 Claims, 6 Drawing Sheets