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Lewis et al.

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- [54] **APPARATUS FOR PACKAGING LOOSE LEAF MATERIAL**
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- [73] Assignee: **Brown & Williamson Tobacco Corporation**, Louisville, Ky.
- [21] Appl. No.: **48,987**
- [22] Filed: **Apr. 16, 1993**
- [51] Int. Cl.⁶ **B65B 41/16; B65B 43/60; B65B 63/02**
- [52] U.S. Cl. **53/170; 53/529; 53/575**
- [58] Field of Search **53/253, 258, 529, 575, 53/456, 170, 172**

Primary Examiner—Linda B. Johnson
Attorney, Agent, or Firm—Charles I. Sherman

[57] ABSTRACT

The present invention comprises a device and method for feeding a cut loose-leaf material such as, for example tobacco, from a weight scale; dropping the tobacco into a hopper; compressing the tobacco into the desired size, shape, and density; and packaging the loose-leaf tobacco product. Packaging is accomplished by wrapping an inner foil and overwrap label around an arbor on a rotating arbor wheel. The package is constructed in various stages as the arbor wheel rotates to various positions. The inner foil is fed and wrapped around the arbor without extending the foil below the body of the package so that the foil does not form a bottom end. The foil extends above the body of the package and is folded to form a top end. An outer label having a sufficient length to extend past the top and bottom of the arbor is overwrapped about the foil innerwrap. The overwrap label extending past the bottom of the arbor is folded and glued over the foil innerwrap to form a top end to the package. The loose-leaf tobacco is compressed and pushed through the arbor into the open end of the package. The package of tobacco is forced off the arbor wheel and the open end of the package is folded and glued as the package is transported therefrom.

[56] References Cited

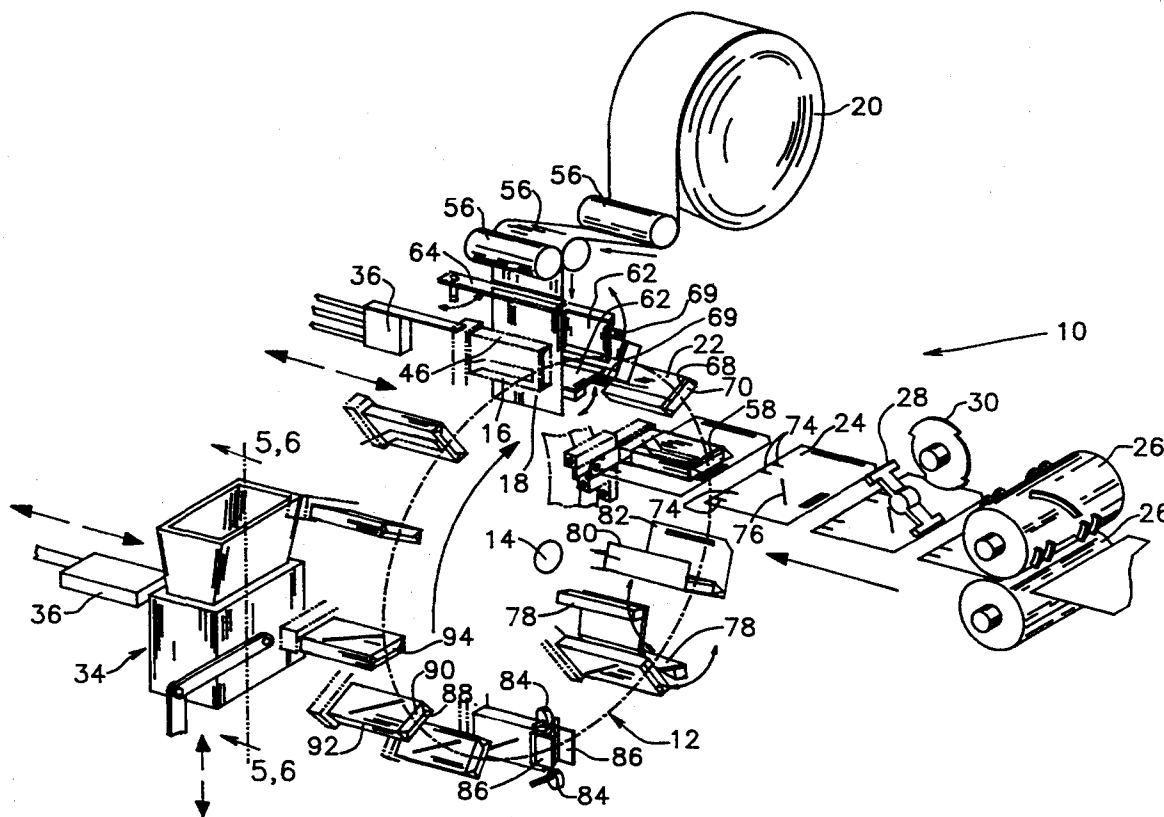
U.S. PATENT DOCUMENTS

1,570,432	1/1926	Busse	53/258
2,360,846	10/1944	Bronander	53/575 X
3,088,499	5/1963	Rieger	53/258 X
3,910,011	10/1975	Beninger	53/258 X
4,241,564	12/1980	Quarenghi	53/575
4,581,004	4/1986	Nagata	53/575 X

FOREIGN PATENT DOCUMENTS

1210874	3/1960	France
916877	1/1963	United Kingdom

12 Claims, 17 Drawing Sheets



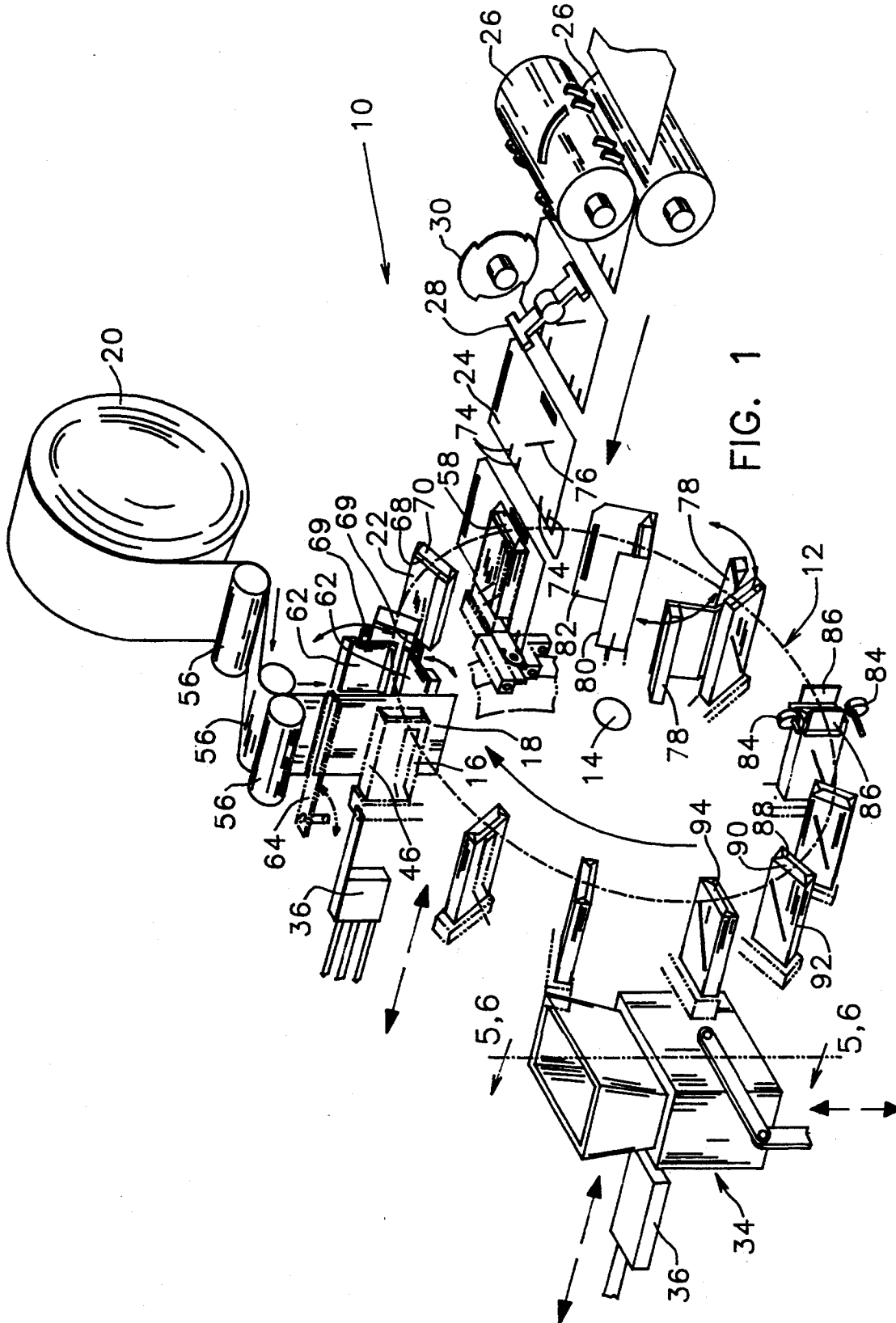


FIG. 1

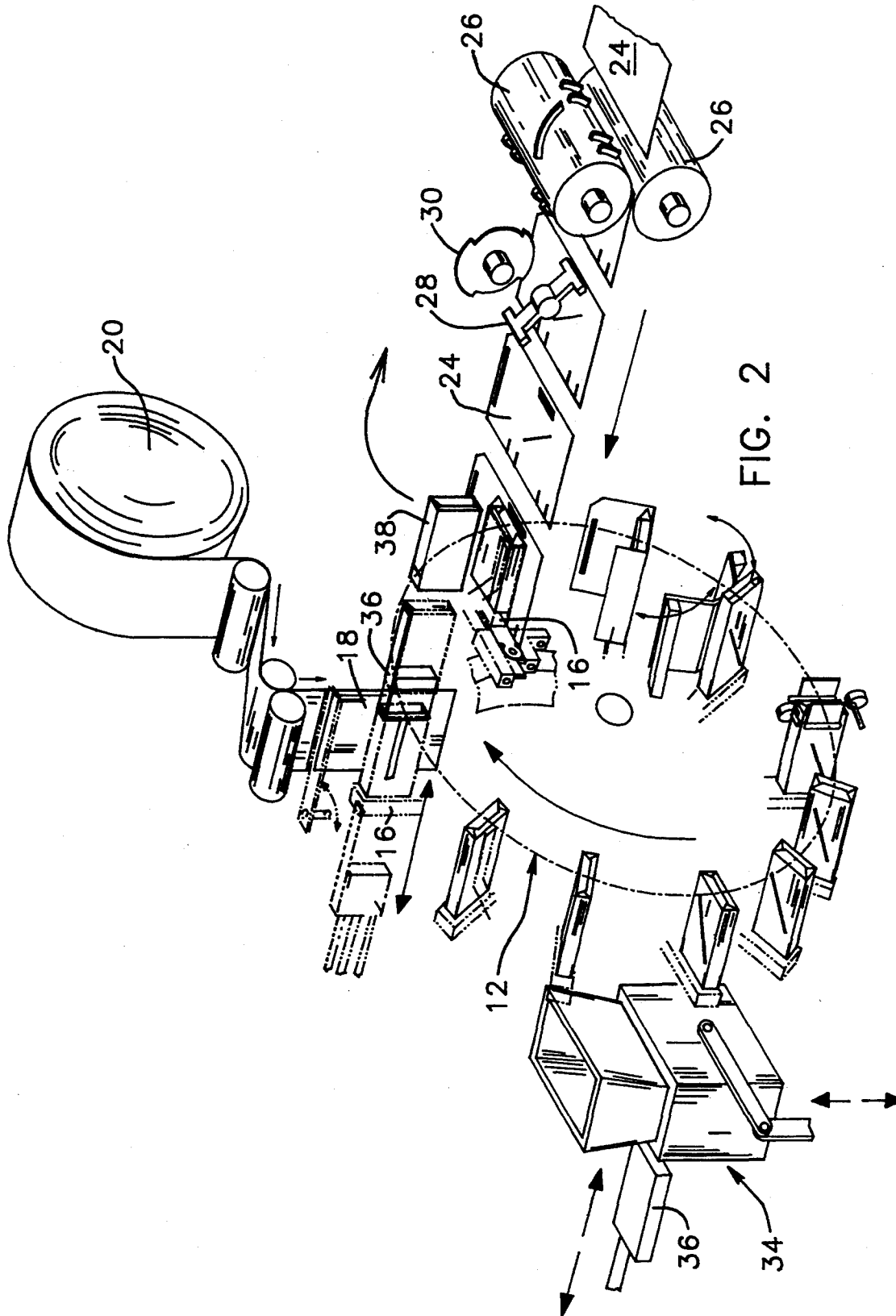
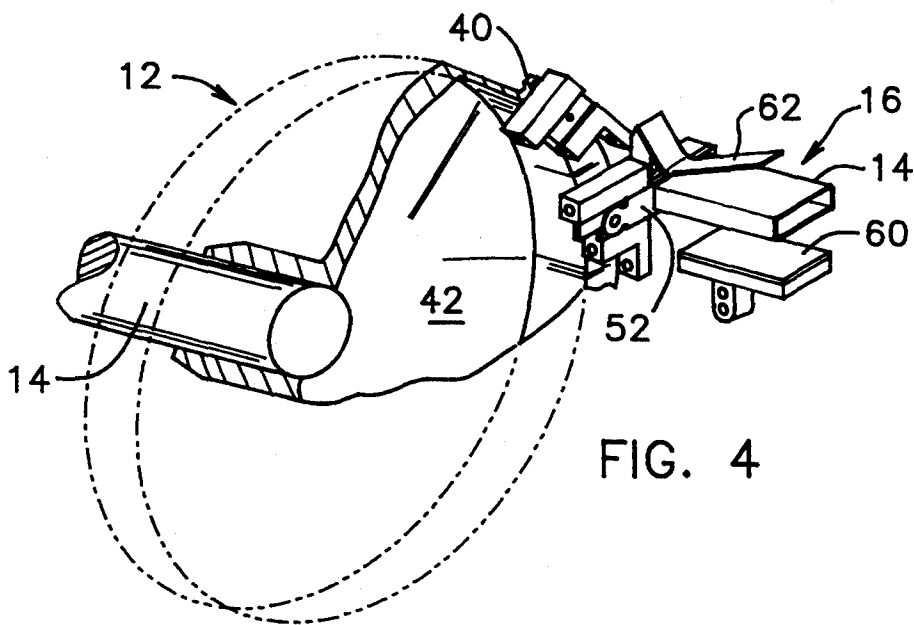
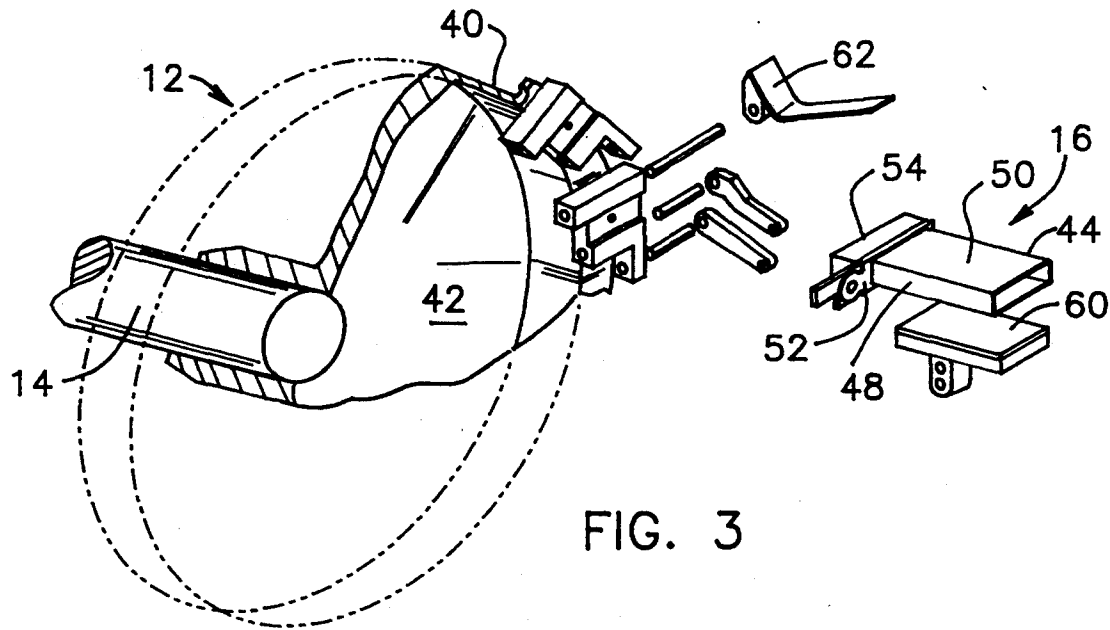
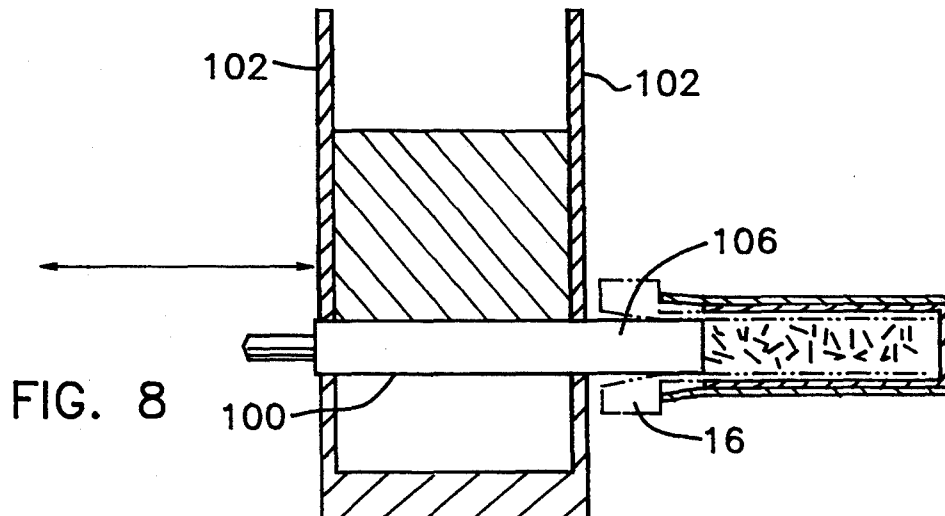
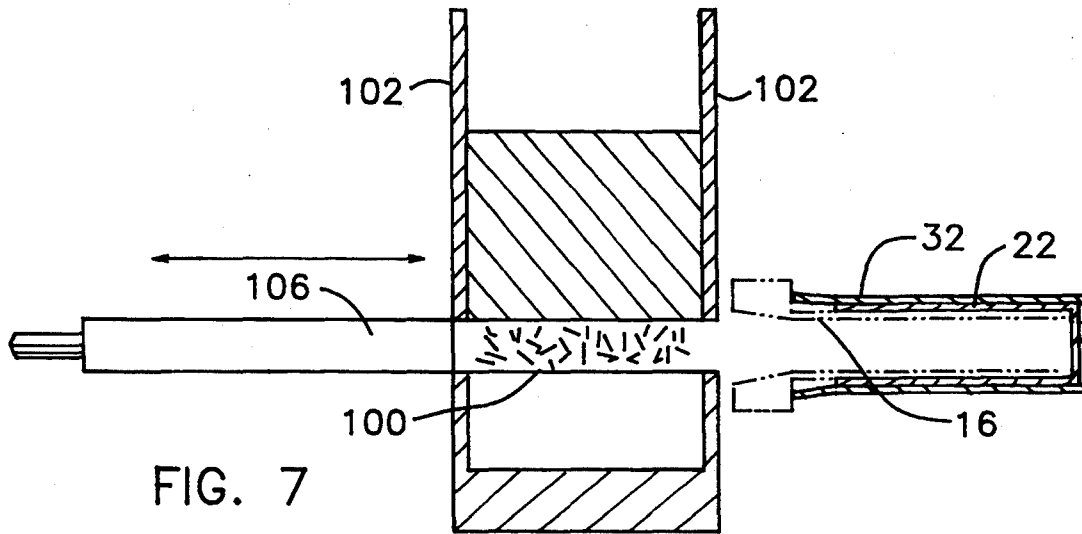
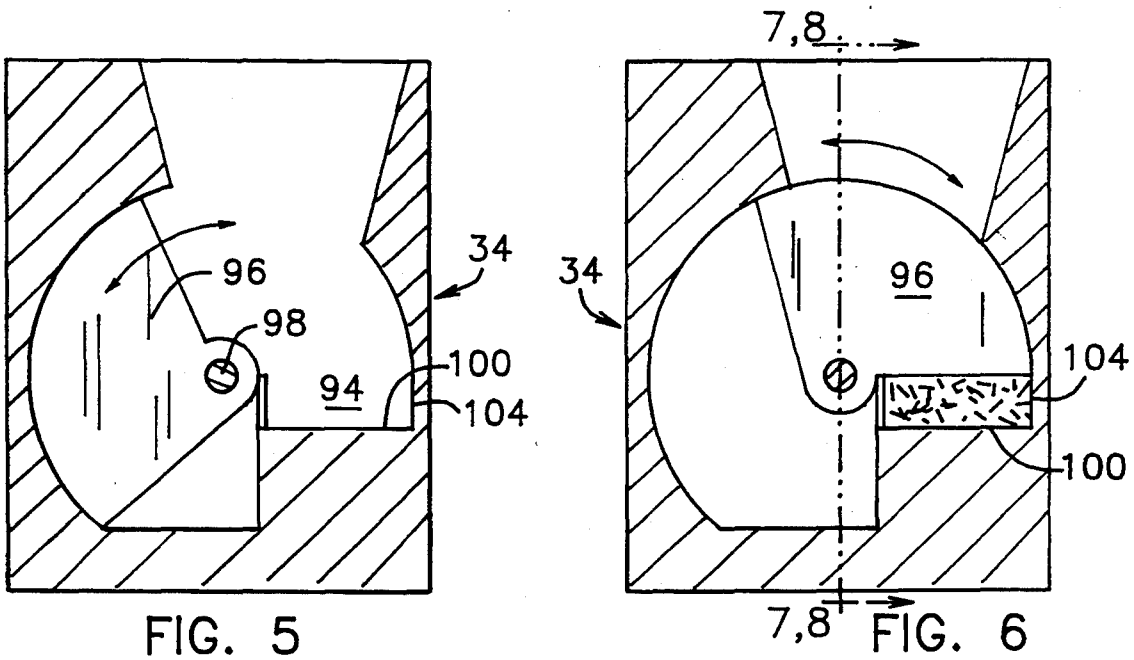


FIG. 2





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