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(54) **DISPENSER WITH MATERIAL-RECOGNITION APPARATUS AND MATERIAL-RECOGNITION METHOD**

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(52) **U.S. Cl.** **242/563; 242/564.2**

(58) **Field of Classification Search** **242/564, 242/564.1, 564.2, 563; 312/34.22, 34.8; 235/462.01, 462.13, 454, 470**

See application file for complete search history.

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(57) **ABSTRACT**

Dispenser apparatus for dispensing flexible sheet material including material-recognition apparatus permitting the dispenser to recognize sheet material from an authorized source and to be enabled for operation with such material. The dispenser preferably includes standard mechanical components for dispensing sheet material from the dispenser including a housing, structure for supporting a roll of sheet material, drive and tension rollers forming a nip through which the sheet material is displaced as the drive roller rotates and drive apparatus in power-transmission relationship with the drive roller. The material-recognition apparatus includes a sensor mounted in the dispenser housing and in position to scan a code, preferably located on the core on which the sheet material is wound. The sensor generates a code signal corresponding to the code. A control circuit operatively connected to the sensor is adapted to receive the code signal and compare the code represented by said code signal to at least one code in a code database. The dispenser is placed in a dispenser-enabled state capable of dispensing sheet material corresponding to agreement between the codes and a dispenser-disabled state in which the dispenser is disabled when no such code agreement exists.

70 Claims, 33 Drawing Sheets

