

(12) United States Patent
Saliba et al.

(10) Patent No.: US 6,427,934 B1
(45) Date of Patent: Aug. 6, 2002

(54) **TAPE REEL FOR MINIMIZING PRINT THROUGH**

(75) Inventors: **George A. Saliba**, Northboro; **Satya Mallick**, Milford; **An Quach**, Worcester; **Chan Kim**, Holliston; **Neil Stanick**, Whitinsville, all of MA (US); **Christopher Rathweg**, Lafayette, CO (US)

(73) Assignee: **Quantum Corporation**, Milpitas, CA (US)

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

(21) Appl. No.: **09/191,250**

(22) Filed: **Nov. 12, 1998**

(51) **Int. Cl.⁷** **G11B 15/66**

(52) **U.S. Cl.** **242/332.7; 242/332.4; 242/349; 242/335**

(58) **Field of Search** **242/332.7, 332.8, 242/345, 348.1, 613.2, 332.4, 532.1, 582, 349, 335**

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,885,751 A * 5/1975 Kelch et al. 242/348.1

4,283,026 A *	8/1981	Werner	242/345
4,662,049 A	5/1987	Hertrich	29/267
4,720,913 A	1/1988	Hertrich	29/819
5,443,220 A *	8/1995	Hoge et al.	242/332.7
5,474,253 A	12/1995	Kasetty et al.	242/614
5,769,346 A	6/1998	Daly	242/332.4
5,803,388 A	9/1998	Saliba et al.	242/348
5,979,813 A	11/1999	Mansbridge et al.	242/332.4
6,050,514 A *	4/2000	Mansbridge	242/332.7

* cited by examiner

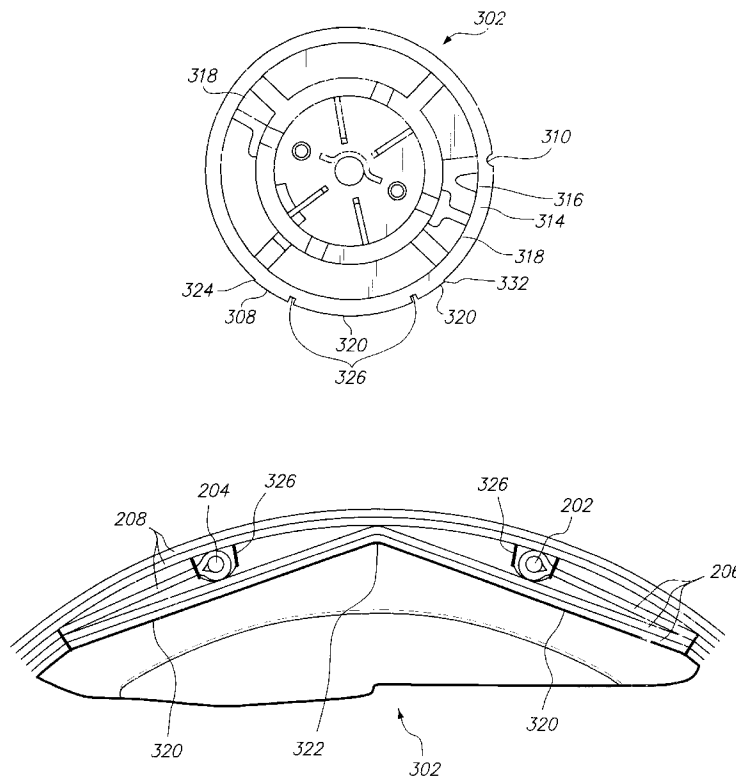
Primary Examiner—John Q. Nguyen

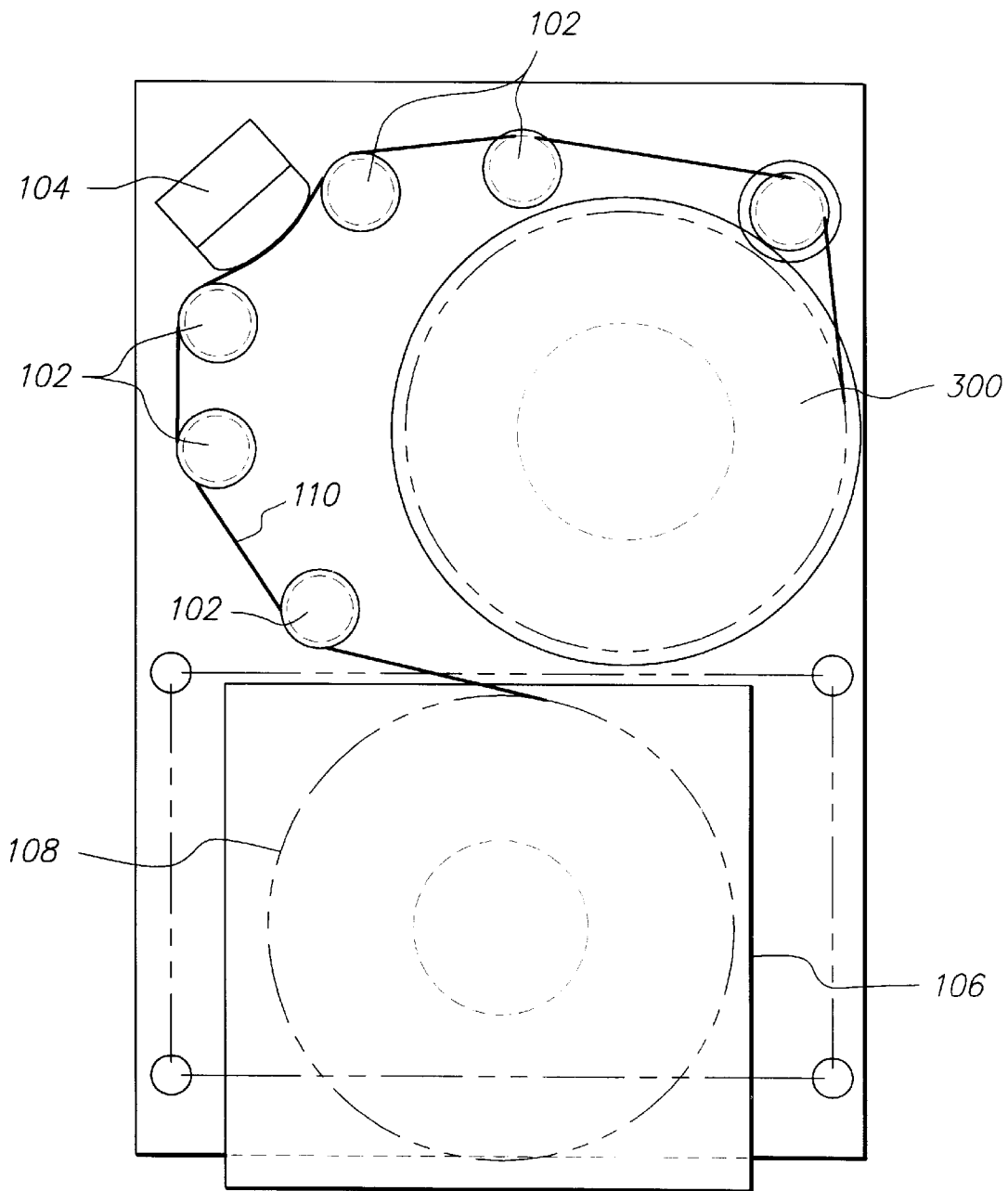
(74) *Attorney, Agent, or Firm*—Steven G. Roeder

(57) **ABSTRACT**

A take-up reel for use in a tape drive for minimizing print through errors, or data transfer from one layer of tape on the take-up reel to an adjacent layer of tape on the take-up reel. The take-up reel is configured to allowing portions of the buckle, coupling the take-up leader to the supply leader, to recess into the take-up reel. The relatively even and concentric configuration of leaders tape and buckle when wound onto the take-up reel prevents the application of significant non-uniform pressure to the data tape wound thereover, which reduces print through sources of data error.

20 Claims, 6 Drawing Sheets





100

FIG. 1

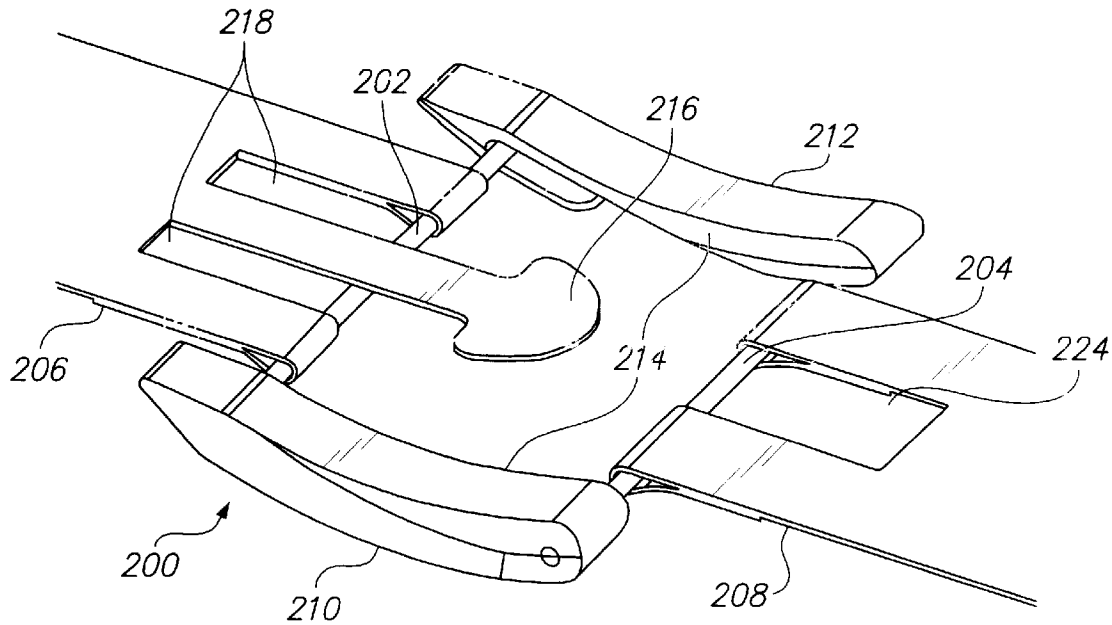


FIG. 2a

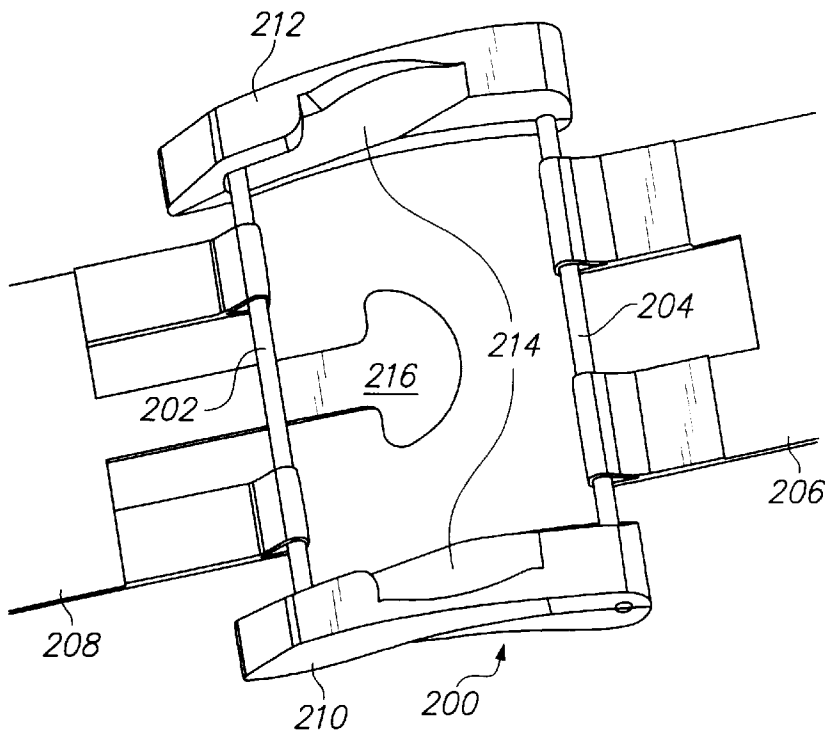
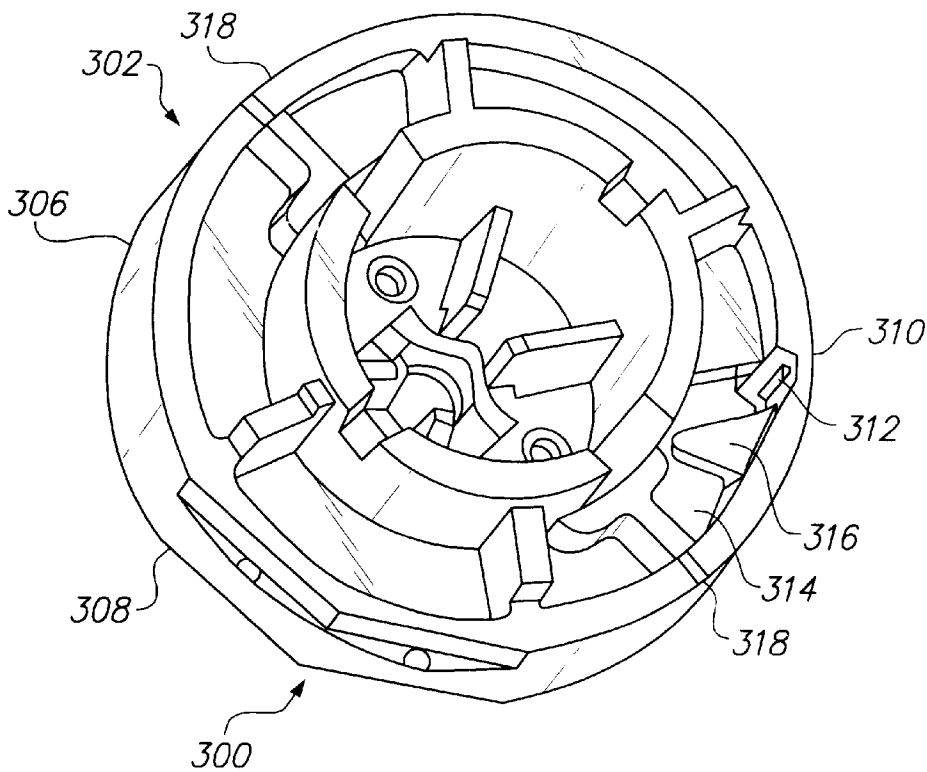
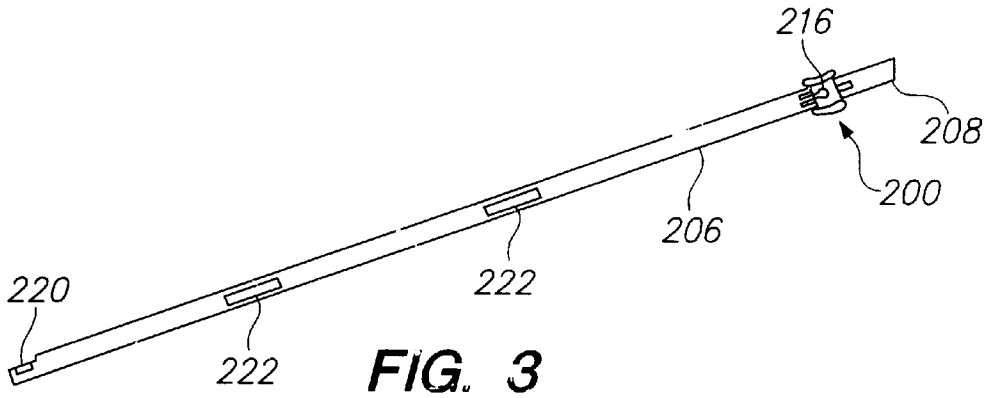


FIG. 2b



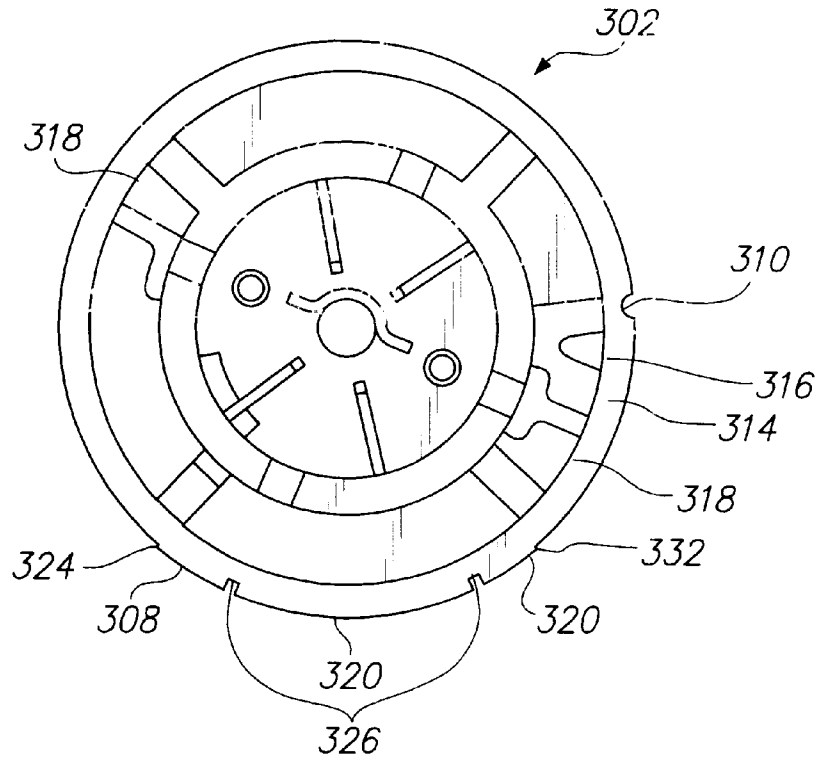


FIG. 5

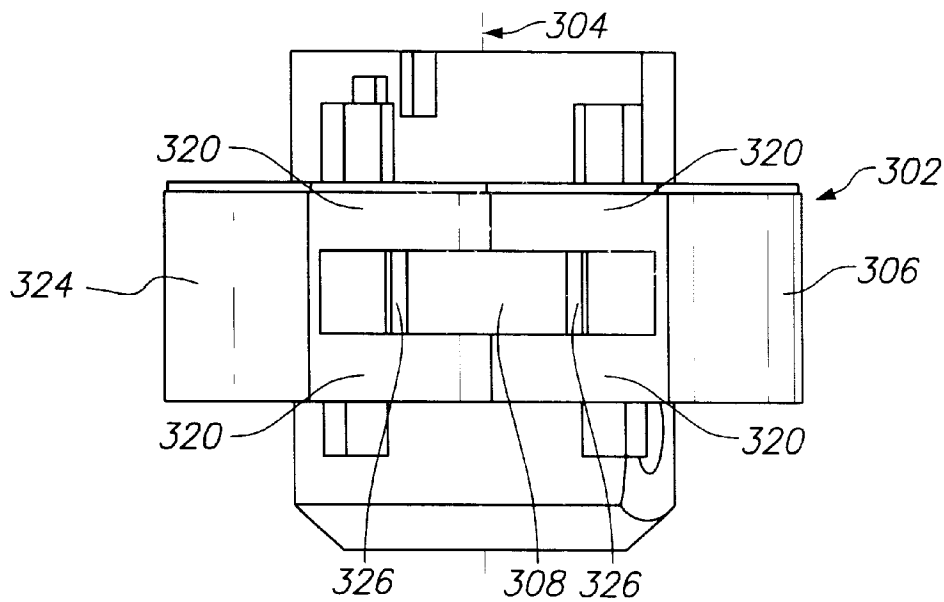


FIG. 6

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