US 20050288711A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2005/0288711 A1**

Fallin et al. (43) **Pub. Date: Dec. 29, 2005**

(54) **LINE LOCK SUTURE ATTACHMENT SYSTEMS AND METHODS**

(76) Inventors: **T. Wade Fallin**, Hyde Park, UT (US); **M. Mary Sinnott**, Logan, UT (US)

Correspondence Address:
MEDICINELODGE INC.
180 SOUTH 600 WEST
LOGAN, UT 84321 (US)

(21) Appl. No.: **11/001,866**

(22) Filed: **Dec. 1, 2004**

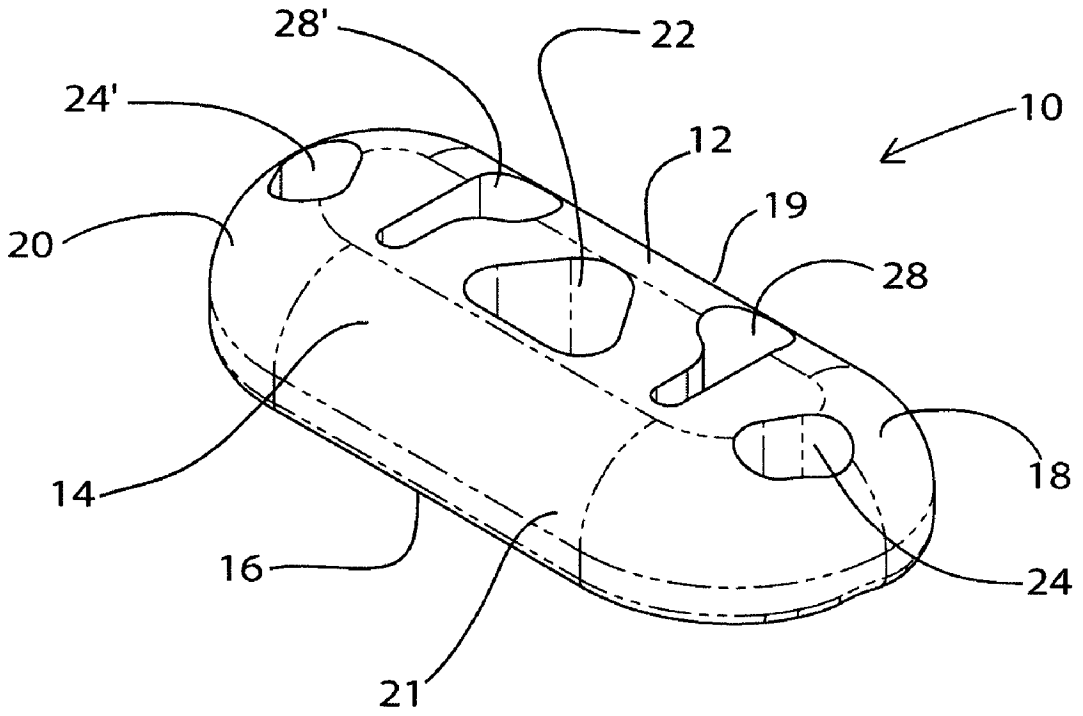
Related U.S. Application Data

(63) Continuation-in-part of application No. 10/942,275, filed on Sep. 15, 2004.
Continuation-in-part of application No. 10/459,375, filed on Jun. 11, 2003.
Continuation-in-part of application No. 10/936,376, filed on Sep. 7, 2004.

Publication Classification

(51) **Int. Cl.**[7] **A61B 17/04**

(52) **U.S. Cl.** **606/232**

(57) **ABSTRACT**

A line lock includes a body at least partially bounding a plurality of passageways such that a suture can only be drawn through the passageways along one direction. The suture is attached to the line lock prior to use in surgery, either by securing one end of the suture to the line lock, or by retaining a loop of the suture with one of the passageways. A needle may be pre-attached to a free end of the suture. The suture may be inserted through the passageways through the use of a cartridge designed to contain the line lock. A threader may pass through the line lock within the cartridge along the desired pathway for the suture. Thus, the suture may be coupled to the threader and drawn through the passageways along the desired pathway by pulling the threader from the cartridge.