

US006575042B1

## (12) United States Patent Rinner

(10) Patent No.: US 6,575,042 B1

(45) **Date of Patent: Jun. 10, 2003** 

## (54) BEAM-TYPE TORSION APPLYING AND MEASURING TOOL

(75) Inventor: James A. Rinner, Racine, WI (US)

(73) Assignee: Beere Precision Medical Instruments,

Inc., Kenosha, WI (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.: 10/074,426

(22) Filed: Feb. 13, 2002

(51) Int. Cl.<sup>7</sup> ...... G01N 3/22; G01N 3/26

## (56) References Cited U.S. PATENT DOCUMENTS

2,394,022 A	2/1946	Storrie
2,417,402 A	3/1947	Storrie
2,464,372 A	3/1949	Booth
2,934,946 A	5/1960	Engquist
4,359,906 A	11/1982	Cordey
4,558,601 A	12/1985	Stasiek et al.
5,048,381 A	9/1991	Allen et al.
5,762,629 A	6/1998	Kambin

Primary Examiner—Max Noori Assistant Examiner—Octavia Davis

(74) Attorney, Agent, or Firm-Arthur J. Hansmann

(57) ABSTRACT

A beam-type torquing and measuring tool having two telescoping members rotationally attached together at a first end of each, and they are relatively rotatable at the other end. One member transmits torque to the workpiece and has a pointer thereon, and the other member has a scale readable relative to the pointer to measure the torque being applied. The members have a central opening extending axially therethrough for canalization, and there may be adapters threadedly attached to the tool ends, and the scale and pointer can be read in their two diametrically opposite locations.

## 20 Claims, 2 Drawing Sheets

