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Gorek et al.

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(54) **MINIMALLY INVASIVE RETRACTOR AND METHODS OF USE**

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

This patent is subject to a terminal disclaimer.

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(57) **ABSTRACT**

A device, system and method for orthopedic spine surgery using a novel screw-based retractor, disclosed herein, that allows for access to the spine through a minimally or less invasive approach. The retractor device is designed to be coupled to a pedicle screw and then to have opposed arms of the retractor spread apart to open the wound proximally. The retractor is removed by pulling it out of the wound whereby the retractor is deformed to pass over the pedicle screw head. The retractor is intended to be made of a stiff plastic material, sterile packaged and disposable after one use. A system and method for using the retractor and performing a minimally invasive spine surgical procedure are also disclosed.

22 Claims, 19 Drawing Sheets

