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(54) **LATCHING MICRO OPTICAL SWITCH**

(75) Inventors: **Ernest J. Garcia**, Albuquerque, NM (US); **Marc A. Polosky**, Tijeras, NM (US)

(73) Assignee: **Sandia Corporation**, Albuquerque, NM (US)

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G02B 6/00 (2006.01)
G02B 6/44 (2006.01)

(52) **U.S. Cl.**
USPC **385/16**

(58) **Field of Classification Search**
USPC 385/14, 15, 16
See application file for complete search history.

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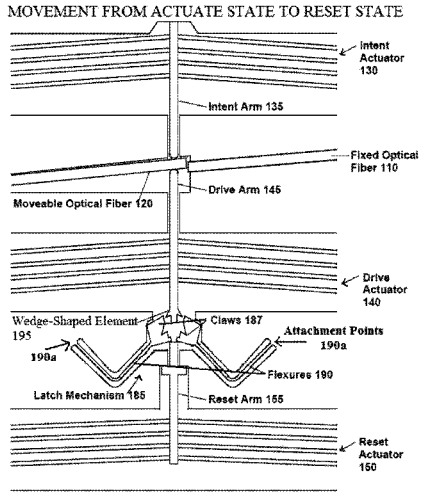
Primary Examiner — Akm Enayet Ullah
(74) *Attorney, Agent, or Firm* — Michael A. Beckett

(57) **ABSTRACT**

An optical switch reliably maintains its on or off state even when subjected to environments where the switch is bumped or otherwise moved. In addition, the optical switch maintains its on or off state indefinitely without requiring external power. External power is used only to transition the switch from one state to the other. The optical switch is configured with a fixed optical fiber and a movable optical fiber. The movable optical fiber is guided by various actuators in conjunction with a latching mechanism that configure the switch in one position that corresponds to the on state and in another position that corresponds to the off state.

17 Claims, 6 Drawing Sheets