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(54) Title: MAGNETIC JOINT AND OPTICAL MOUNT USING THE SAME

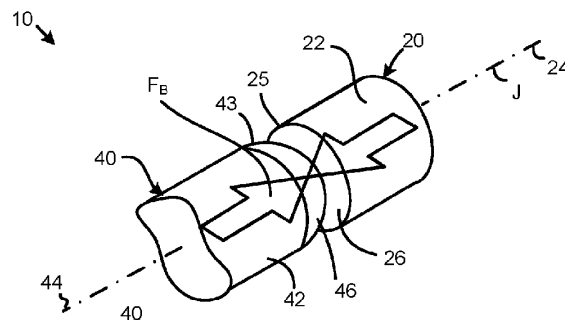


FIG. 1A

(57) **Abstract:** A laterally unconstrained magnetic joint has a first component comprising a permanent magnet material; and a second component comprising a permanent magnet or ferromagnetic material, where the first component and the second component are magnetically attracted to each other, and where the first component and the second component interface via continuous interface surfaces of different curvature that form and maintain point contact throughout a range of angular and lateral actuation. Movement of the first component is laterally unconstrained with respect to the second component. One or more such magnetic joints can be used in a mount for a payload, such as an wide angle optical mount with three degrees of freedom. The mount may include linear actuators to position the payload.

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