

(54) **SELF-LOCKING COUPLING DEVICE**

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(57) **ABSTRACT**

The invention is directed to self-locking coupling devices which are suitable for connecting conduits, pneumatic line segments, hydraulic line segments, fuel line segments or other fluid line segments tubes, ducts, and the like. The self-locking coupling device consists of a first fitting, a second fitting, and a locking sleeve. The first fitting having a first end connect to a first conduit and a second end for receiving a second fitting attached to a second conduit. The first fitting having a coupling portion and a locking portion. The coupling portion formed with an internal thread section. The coupling portion formed with an internal thread section. The locking portion having at least one locking tang attached to the coupling portion and extending to the second end of the first fitting. The at least one locking tang formed with an internal locking shoulder projecting radially inwardly at the second end of the first fitting. The second fitting having a first end and a second end. The second fitting formed with an external thread section adjacent to the first end and an annular ridge projecting radially outward adjacent the second end wherein the engagement of corresponding internal and external thread sections causes the at least one locking tang to bend and flex radially thereby allowing the internal locking shoulder to ride up and over the annular ridge. The locking sleeve mounted about the first fitting and being movable between an unlocked position and a locked position.

11 Claims, 4 drawing sheets