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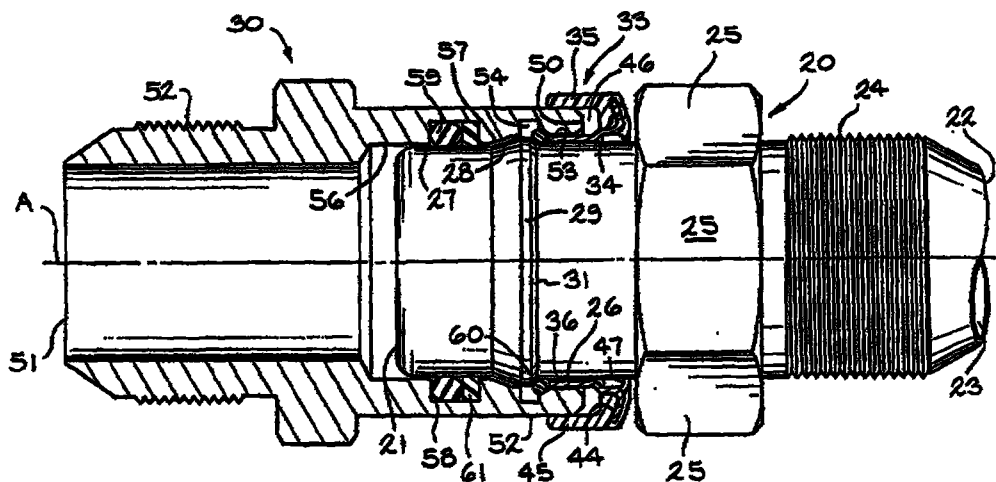
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(71) Applicant: AEROQUIP CORPORATION [US/US]; 3000 Strayer Road, Maumee, OH 43537 (US).			
(72) Inventors: KARL, Terry, L.; 10930 Berkey Highway, Blissfield, MI 49228 (US). GLODEN, Gregory, J.; 7210 Pilliod Road, Holland, OH 43528 (US). VAN RIPER, Philip, C.; Apartment 6, 7220 Nightingale Drive, Holland, OH 43528 (US). ZAINEA, John, Paul; 4838 Dog Creek Road, Middle Point, OH 45863 (US). MYERS, John, T.; 4623 Road 117, Haviland, OH 45851 (US).			
(74) Agents: PORCELLO, James, F., Jr. et al.; Emch, Schaffer, Schaub & Porcello Co., P.O. Box 916, Toledo, OH 43697-0916 (US).			

(54) Title: **COUPLING ASSEMBLY**



(57) Abstract

A coupling assembly including a female member (30) having a receiving end (50) with an axially extending passageway (53) and inwardly facing groove (54) extending outwardly from said passageway (53) in a position spaced from the receiving end (50). A split metal locking ring (60) is positioned in the groove (54). A male member (20) is sized to be received in said receiving end (50) and includes a rib having (i) a ramp (28) tapering in a direction away from the forward end (21) and away from the axis (A) at an angle in the range of 10 to 25 degrees, (ii) a cylindrical surface (29) parallel to the axis (A) extending rearwardly from the ramp a distance of at least 0.010 and preferably 0.030 inch and (iii) a shoulder (31) tapering away from the forward end (21) and inwardly toward the axis (A). Upon insertion of the male member (20) into the female member (30), the split metal ring (60) is expanded as it rides over the ramp (28), engages the cylindrical surface (29) and retracts to a smaller diameter approaching its original size to engage the shoulder (31) thereby locking the male member (20) into engagement with the female member (30).