

LOCK ASSEMBLY FOR HYDRAULIC FRACING VALVE

ABSTRACT

A lock open device 44 for use with a valve 30 in a hydraulic fracturing system 10, which maintains the valve 30 in an open position. The lock open device 44 includes a plate 48 with beveled edges and spring loaded ball bearings 70 strategically disposed to contact the edges and interfere with axial movement of the plate 48. The plate 48 couples to a gate 36 member in the valve 30, so that the interference between the plate 48 and the ball bearings 70 maintains the valve 30 in a designated open or closed position. The angle of the bevel regulates how much force is required to urge the plate 48 past the ball bearings 70 to thereby open/close the valve 30.

Figure 1