

RIGIDIZED SEAL ASSEMBLY USING AUTOMATED SPACE-OUT MECHANISM

ABSTRACT

A seal assembly is provided. The seal includes an upper body; a lower body having a seal for sealing between a first wellhead system component and a second wellhead system component; and a space-out mechanism disposed between the upper body and the lower body, the space-out mechanism comprising a ramp ring having at least one tapered surface. The upper body has at least one tapered surface configured to interface with the at least one tapered surface of the ramp ring, the ramp ring is configured to rotate relative to the upper body and the lower body, and the at least one tapered surface of the ramp ring and the at least one tapered surface of the upper body are configured to bear against each other to rigidize the system.

FIGURE 1A