ABSTRACT OF THE DISCLOSURE

DOUBLE SHEARING RAMS FOR RAM TYPE BLOWOUT PREVENTER

Double shearing rams designed for use in a standard ram-type blowout preventer used in oil and gas drilling and workover operations are disclosed. The double shearing rams include an upper shear ram and a mating lower shear ram. The upper shear ram includes an upper cutting blade and a lower guide blade vertically spaced to form a cavity therebetween. The cavity is sized to receive the lower ram's cutting blade in close fitting engagement when the rams are closed. The upper shear ram has a primary cutting edge formed on its leading edge and a secondary edge vertically and axially displaced from the primary cutting edge. During shearing operations, initial movement of the shear rams allows the upper shear ram's primary cutting edge to cooperate with the lower shear ram's cutting blade to make an initial shear of the member or members in the blowout preventer's bore. Further closing of the shear rams allows the upper shear ram's secondary cutting edge to cooperate with the lower shear ram's cutting blade to make a second shear of any remaining member or members in the blowout preventer's bore. A plurality of guide pins positioned on the upper shear ram and the lower shear ram notched cutting edge cooperate to maintain the members to be sheared between the upper and lower shear ram.

FIG. 1