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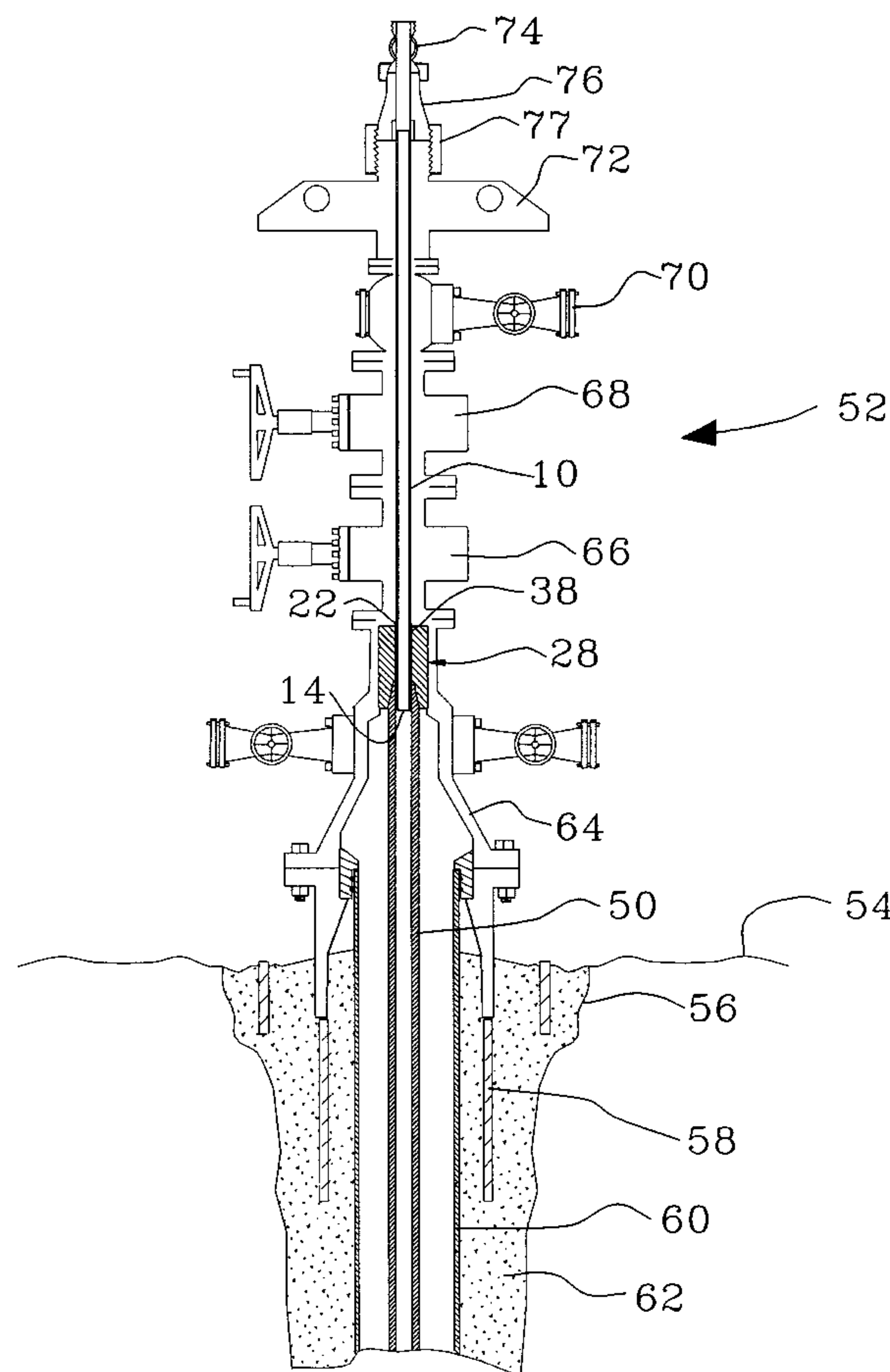
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(54) **DISPOSITIF PERMETTANT D'AUGMENTER LA VITESSE DE
TRANSFERT DES FLUIDES STIMULANT LA PRODUCTION
A TRAVERS UNE TETE DE PUITS**

(54) **APPARATUS FOR INCREASING THE TRANSFER RATE OF
PRODUCTION STIMULATION FLUIDS THROUGH A
WELLHEAD OF A HYDROCARBON WELL**



(57) Présentation d'un dispositif permettant d'accroître la vitesse de transfert des fluides stimulant la production à travers la tête d'un puits d'hydrocarbures. Le dispositif

(57) An apparatus for increasing the transfer rate of production stimulation fluids through a wellhead of a hydrocarbon well is disclosed. The apparatus includes a



ABSTRACT

An apparatus for increasing the transfer rate of production stimulation fluids through a wellhead of a hydrocarbon well is disclosed. The apparatus includes a mandrel for a wellhead isolation tool and a tubing hanger for use in conjunction with the mandrel. The mandrel includes a bottom end to which an annular seal is bonded. The annular seal cooperates with a sealing surface in a top end of the tubing hanger to isolate the wellhead equipment from the high pressures and corrosive and/or abrasive materials pumped into the well during a production stimulation treatment. The novel construction for the mandrel and the tubing hanger eliminates the requirement for a packoff assembly attached to a bottom of the mandrel and thereby permits the mandrel to have a larger internal diameter for increasing the transfer rate of production stimulation fluids through the wellhead. The advantages include a mandrel which accommodates faster transfer rates, is less prone to catch on constrictions as the mandrel is stroked through the wellhead and requires no packoff assembly for sealing within the production tubing. A further advantage is the provision of a mandrel for a wellhead isolation tool that eliminates all joints between the high pressure tubing connector and the production tubing to minimize washout during production stimulation using abrasive proppants.

