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(54) **METHOD AND APPARATUS FOR JET DRILLING DRAINHOLES FROM WELLS**

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Related U.S. Application Data

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(51) **Int. Cl.⁷** **E21B 7/18**

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(58) **Field of Search** **175/45, 62, 61,**
175/67, 26, 27, 424

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(57) **ABSTRACT**

Nozzle jet drill bits for drilling drainholes from a wellbore
are provided in a 4 ½-inch or larger casing. The drills are
small enough to allow use of a bit diverter to turn the bits
about 90 degrees in the casing when attached to an elasto-
meric high-pressure tube. Pumping of fluid, which may
contain abrasive particles, through the bits allows drilling
through the wall of casing, if present, and continued drilling
into a formation surrounding the well without withdrawing
the bit from the well. Direction-indicating instruments and
geophones may be used to measure or monitor direction and
location of the bit. One type of jet drill that may be used can
change direction of drilling by controlling pressure at the bit.

23 Claims, 3 Drawing Sheets

