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(54) Shaped charge liner with precursor liner

(57) A method to remove well bore fluid from the path of a shaped-charge jet in order to reduce the effect it has on the jet tip. A precursor liner (70) and a primary liner (50) are both pressed in the same housing (12). The primary liner (70) is similar or equivalent to a stand-

ard big hole shaped charge liner. The precursor liner (70) is pressed into the apex end (54) of the primary liner (50) and upon detonation is intended to form an initial very fast moving precursor jet to open a path through the fluid of the well bore annulus for the following primary jet.

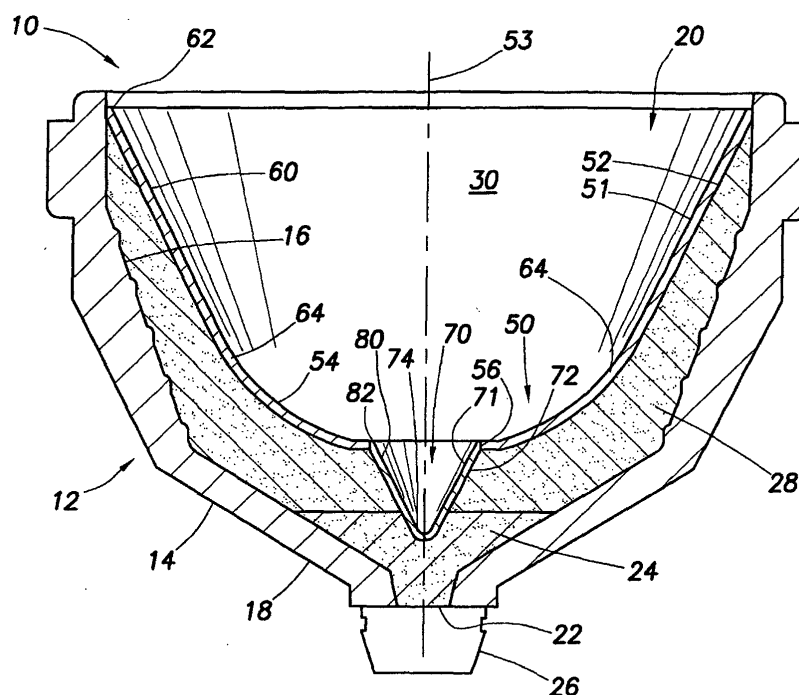


FIG.1

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EUROPEAN SEARCH REPORT

Application Number
EP 03 25 1375

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 22 March 2004	Examiner Ziegler, H-J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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