



(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
12.04.2006 Bulletin 2006/15

(51) Int Cl.:
E21B 10/16^(2006.01) E21B 10/08^(2006.01)

(43) Date of publication A2:
26.01.2005 Bulletin 2005/04

(21) Application number: 04025560.6

(22) Date of filing: 31.08.1999

(84) Designated Contracting States:
GB IT

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(30) Priority: 31.08.1998 US 98442 P

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(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
03021139.5 / 1 371 811
99945376.4 / 1 117 894

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(54) Method of designing a roller cone bit

(57) Disclosed herein is a method of designing a roller cone bit, comprising the steps of:

calculating the curved trajectory of a non-axisymmetric tooth through formation material at the cutting face, as the bit and cones rotate;
calculating a straight line approximation to said curved trajectory; and
orienting said tooth with respect to said approximation, and not with respect to said curved trajectory.

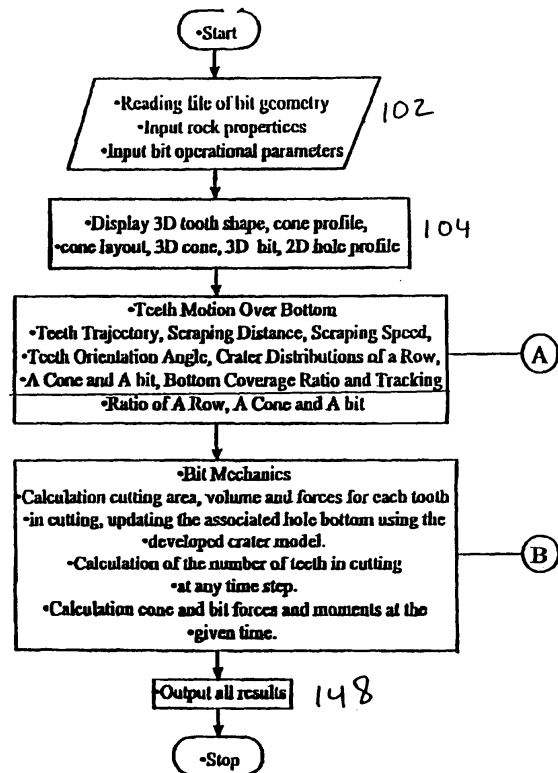


FIGURE 1A



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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 14 February 2006	Examiner Schouten, A
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ANNEX TO THE EUROPEAN SEARCH REPORT
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