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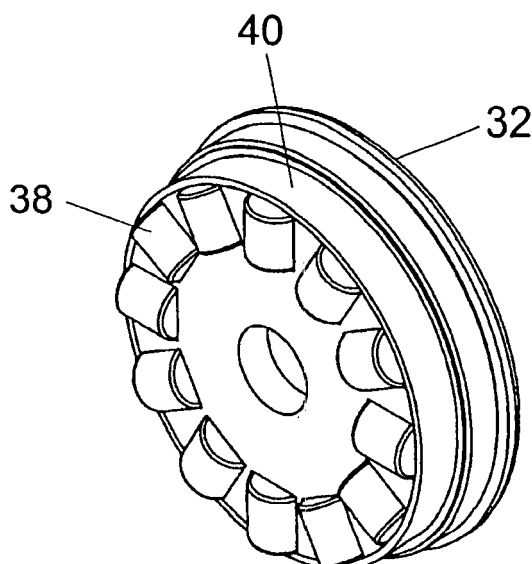
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(54) **Rolling hammer drill**

(57) A hammer drill with rolling contact at the contact surfaces for transmission of axial force between a drive shaft (18) and wave race (42). By using roller bearings (38), line contact is obtained. The area of contact is thus

close to zero as opposed to a relatively large area in engagement systems using toothed surfaces. Use of point or line contact reduces heat generation and reduces energy loss due to friction.



**Figure 2**



## EUROPEAN SEARCH REPORT

Application Number  
EP 05 01 2334

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                        |                                                      |                                            |
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| CATEGORY OF CITED DOCUMENTS<br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>& : member of the same patent family, corresponding document |                                                                                                                                                                        |                                                      |                                            |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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