

Title (en)  
ROTARY MILL

Title (de)  
ROTIERENDE MÜHLE

Title (fr)  
BROYEUR ROTATIF

Publication  
**EP 1255611 B1 20071031 (EN)**

Application  
**EP 00900046 A 20000106**

Priority  
CA 0000002 W 20000106

Abstract (en)  
[origin: WO0149417A1] A rotary mill for reduction of ore to particles is described. The rotary mill comprises a primary reduction chamber (18), a secondary reduction chamber (20) and an outlet chamber (22). Material entering the primary reduction chamber (18) is deflected by an impact rotor (16), which shatters the material and sends the resulting particles into a plurality of shatter bars (28). The shatter bars (28) further reduce these particles and deflect them back towards the rotor so that the reduced particles encounter newly shattered material, causing further attrition. In addition, the rotary mill includes an exhaust fan (14) arranged to generate an airflow from the primary reduction chamber, through the secondary reduction chamber and into the outlet chamber. This airflow carries the reduced particles into the secondary reduction chamber (20) wherein the particles are thrown against reduction means (32). The reduction means (32) are positioned between the secondary reduction chamber (20) and the outlet chamber (22) such that only particles below a certain size enter the outlet chamber. Material of sufficiently reduced size enters the outlet chamber wherein it is separated into fine particles and heavier particles. Specifically, the heavier particles fall out of the airflow and gather at the base of the outlet chamber until a sufficient weight accumulates to open the balance door (40) which expels the heavy material from the rotary mill.

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