

Title (en)  
Method and device for stabilising an underground broken out cavity

Title (de)  
Verfahren und Einrichtung zum Stabilisieren eines beim Untertagebau ausgebrochenen Hohlraumes

Title (fr)  
Procédé et appareil pour stabiliser une cavité souterraine éclaté

Publication  
**EP 1564369 B1 20071212 (DE)**

Application  
**EP 04405086 A 20040216**

Priority  
EP 04405086 A 20040216

Abstract (en)  
[origin: EP1564369A1] Process for stabilizing a hollow chamber (4) formed during mining comprises using an upsetting body (7) formed as an upsetting element containing particles, preferably expanded glass or plastic particles, embedded in a binder, preferably cement or plastic, and reinforcing elements made from steel, plastic or glass. An independent claim is also included for a device for stabilizing a hollow chamber formed during mining. Preferred Features: The upsetting body has a compression strength of at least 1 MPa and a hollow chamber amount of 10-90 % of the total volume. The reinforcing elements are steel fibers.

IPC 8 full level  
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CPC (source: EP US)  
**E21D 11/05** (2013.01 - EP US); **E21D 11/083** (2013.01 - EP US); **E21D 21/0086** (2013.01 - EP US)

Cited by  
EP1933005A1; EP2042686A1; NO20171522A1; NO345341B1; DE202021003746U1; US8979434B2; EP2570397A2; US11459886B2; US11994029B2; WO2011069480A3; EP4194664A1; WO2023104772A1

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