

Title (en)  
PROCESS AND APPARATUS FOR THE PREPARATION OF SYNTHESIS GAS

Publication  
**EP 0290087 B1 19900919 (EN)**

Application  
**EP 88200829 A 19880427**

Priority  
DE 3714915 A 19870505

Abstract (en)  
[origin: EP0290087A2] A process for the preparation of synthesis gas by partial combustion of finely divided solid carbon-containing fuel with an oxygen-containing gas in a reactor. The liquid slag formed during the partial combustion process falls into a water bath or slag quench vessel where it solidifies and from there falls by gravity into a lockhopper from which the solidified slag is batchwise sluiced out of the gasification system. A gas bubble or gascap is created and maintained in the lockhopper, the pressure of the gas bubble being lower than the pressure in the slag quench vessel. Thus an initial downwards flow of water and slag is created during opening of the valves between the lockhopper and the slag quench vessel.

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**C10J 3/46**; **C10J 3/52**

IPC 8 full level  
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**C10J 3/485** (2013.01); **C10J 3/526** (2013.01); **C10J 3/84** (2013.01); **C10K 1/101** (2013.01); **C10J 2200/156** (2013.01); **C10J 2300/093** (2013.01); **C10J 2300/0956** (2013.01); **C10J 2300/0959** (2013.01)

Cited by  
CN118667586A; US7794514B2; US6755980B1; WO0121736A1; WO2009092569A3; US8414780B2; DE102008005704A1; WO2010006746A2; DE102008033095A1; US8317885B2; DE102008035386A1; US7862632B2; US9102883B2; WO2010006747A2; DE102008033094A1; US8915980B2; TWI494422B; TWI463005B; TWI495717B

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**EP 88200829 A 19880427**; AU 1552588 A 19880503; CA 564586 A 19880420; CN 88102581 A 19880503; DE 3714915 A 19870505; DE 3860637 T 19880427; JP 10778188 A 19880502; ZA 883134 A 19880503