

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

Publication
EP 0290087 A3 19890208 (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
C10J 3/72 (2006.01); **C10J 3/46** (2006.01); **C10J 3/52** (2006.01); **C10L 3/06** (2006.01)

CPC (source: EP)
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Citation (search report)
• [X] US 3235313 A 19660215 - REINHARD WALDHOFER
• [A] GB 2086931 A 19820519 - TEXACO DEVELOPMENT CORP
• [A] US 4533363 A 19850806 - JAHNKE FREDERICK C [US], et al

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