

Title (en)
Metallic iron nuggets

Title (de)
Eisenklumpen

Title (fr)
Pépites de fer métalliques

Publication
EP 2500441 A1 20120919 (EN)

Application
EP 12004528 A 20070726

Priority
• EP 07813408 A 20070726
• US 82036606 P 20060726

Abstract (en)
Method and system for producing metallic nuggets includes providing reducible mixture of reducing material (such as carbonaceous material) and reducible iron bearing material (such as iron oxide) arranged in discrete portions, such as mounds or briquettes, on at least a portion of a hearth material layer (such as carbonaceous material). A coarse overlayer of carbonaceous material is provided over at least some of the discrete portions. Heating the discrete portions of reducible mixture to 1425 °C or 1400 °C or 1375 °C results in formation of an intermediate product of metallic iron nuggets and slag, and one or more metallic iron nuggets. The intermediate product with less than 5% mass MgO in the slag may have the ratio of percent by weight sulfur in the slag over percent sulfur in the metallic nuggets of at least about 12 or at least about 15. The metallic iron nuggets may have a sulfur content of less than 0.03%.

IPC 8 full level
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CPC (source: EP)
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Citation (applicant)
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