

Title (en)  
STEEL-MAKING PROCESS

Publication  
**EP 0030360 A3 19810902 (DE)**

Application  
**EP 80107542 A 19801203**

Priority  
• DE 2951156 A 19791211  
• DE 3008145 A 19800304

Abstract (en)  
[origin: US4356035A] Oxygen is introduced onto the surface of a molten ferrous metal through at least one water-cooled lance disposed above the melt surface while an oxygen free gas in which is entrained ground solids is intermittently introduced into the molten ferrous metal through tuyeres disposed below the melt surface.

IPC 1-7  
**C21C 5/32**

IPC 8 full level  
**C21C 5/32** (2006.01); **C21C 5/35** (2006.01)

CPC (source: EP US)  
**C21C 5/35** (2013.01 - EP US); **C21C 5/305** (2013.01 - EP US)

Citation (search report)  
DE 2755165 A1 19790726 - MAXIMILIANSHUETTE EISENWERK

Cited by  
EP0107609A1; EP0069490A1; US4582479A; EP0257450A3; DE4213007C1; EP0137913A1; EP0236868A1; DE3607777A1; WO2019158479A1; EP3757234A1; WO8502203A1; EP2266590A2; EP2316468A1; EP2316469A1; EP0017963B1

Designated contracting state (EPC)  
AT BE FR GB IT LU NL SE

DOCDB simple family (publication)  
**EP 0030360 A2 19810617; EP 0030360 A3 19810902; EP 0030360 B1 19831102; EP 0030360 B2 19880928**; AT E5202 T1 19831115; AU 540799 B2 19841206; AU 6530280 A 19810618; BR 8008075 A 19810630; CA 1147966 A 19830614; CZ 278884 B6 19940817; PL 228390 A1 19810807; US 4356035 A 19821026

DOCDB simple family (application)  
**EP 80107542 A 19801203**; AT 80107542 T 19801203; AU 6530280 A 19801211; BR 8008075 A 19801210; CA 366629 A 19801211; CS 873980 A 19801211; PL 22839080 A 19801211; US 21484480 A 19801210