

Title (en)  
Double hearth electric arc furnace for continuous melting

Title (de)  
Doppel-Herd Elektro-Lichtbogenofen zum kontinuierlichen Schmelzen

Title (fr)  
Four à arc électrique à double sole pour la fusion en continu

Publication  
**EP 0843020 B1 20020417 (EN)**

Application  
**EP 97119472 A 19971106**

Priority  
IT UD960218 A 19961113

Abstract (en)  
[origin: EP0843020A1] Electric arc furnace to continuously melt steel and its alloys including at least a first body (11) comprising an upper zone (35) for the loading of the raw material (17) and a lower zone (36) for the melting and the first refining of the molten metal, and at least a second body (12) including a zone (37) with the function of decanting and refining the liquid metal and with a tapping hole (30) for the liquid metal, the first (11) and second (12) bodies forming a single body connected by means of a channel (13) through which the liquid metal is transferred, the upper zone (35) of the first body (11) cooperating at least with loading means (24), the first (11) and second (12) bodies including at least a respective central and vertical electrode (14, 114) and relative anodes (15) located on the bottom part, the first body (11) including on the side walls heating burners (22) and supersonic lances (23) to blow in oxygen and the second body (12) including on the bottom part tuyères (26) to blow in carbon, the loading means (24) to load the raw material (17) being of the continuous type and associated with means to stir and distribute (19, 20) the raw material (17) in a homogeneous manner, the channel (13) being associated with means to regulate the flow from one body (11) to the other (12). <IMAGE>

IPC 1-7  
**C21C 5/52**; **C21C 5/56**; **F27D 13/00**; **C22B 1/00**

IPC 8 full level  
**C21C 5/52** (2006.01); **C21C 5/56** (2006.01); **F27D 13/00** (2006.01)

CPC (source: EP)  
**C21C 5/5252** (2013.01); **C21C 5/565** (2013.01); **F27D 13/002** (2013.01)

Cited by  
EP1181492A4; CN110343869A; CN107218812A; CN110425893A; US6264883B1; WO9900522A1

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