

Title (en)  
SCANDIUM CONCENTRATE PRODUCTION METHOD

Title (de)  
SCANDIUMKONZENTRATHERSTELLUNGSVERFAHREN

Title (fr)  
PROCÉDÉ DE PRODUCTION DE CONCENTRÉ DE SCANDIUM

Publication  
**EP 3081670 B1 20170913 (EN)**

Application  
**EP 15740662 A 20150123**

Priority  
• JP 2014012666 A 20140127  
• JP 2015051827 W 20150123

Abstract (en)  
[origin: EP3081670A1] The present invention effectively recovers a scandium concentrate from an Al-Sc alloy. This scandium concentrate production method includes: a molten mixture production step (S1) in which an alloy that contains aluminum and scandium is brought into contact with chlorine and melted in order to produce a molten mixture of aluminum chloride and scandium chloride; a first electrolysis step (S2) in which the molten mixture is subjected to first electrolysis using a first cathode at a potential that is between the potential that causes aluminum to form a metal and the potential that causes scandium to form a metal and aluminum is produced around the first cathode; and a second electrolysis step (S3) in which, after a molten aluminum production step, the molten mixture is subjected to second electrolysis using a second electrode at a potential that makes it possible to recover scandium and a scandium concentrate is produced around a second cathode.

IPC 8 full level  
**C22B 59/00** (2006.01); **C22C 21/00** (2006.01); **C25C 3/06** (2006.01); **C25C 3/34** (2006.01); **C25C 7/06** (2006.01)

CPC (source: EP)  
**C22B 59/00** (2013.01); **C22C 21/00** (2013.01); **C25C 3/06** (2013.01); **C25C 3/34** (2013.01); **C25C 7/06** (2013.01)

Cited by  
CN110129836A; WO2019040016A3

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3081670 A1 20161019; EP 3081670 A4 20161221; EP 3081670 B1 20170913**; JP 2015140445 A 20150803; JP 5907187 B2 20160426; WO 2015111697 A1 20150730

DOCDB simple family (application)  
**EP 15740662 A 20150123**; JP 2014012666 A 20140127; JP 2015051827 W 20150123