

Title (en)

Heating of metal alloy sheet by thermal conduction

Title (de)

Heizung des Metalllegierung Blattes durch thermische Übertragung

Title (fr)

Chauffage de feuille d'alliage en métal par la conduction thermique

Publication

**EP 1566462 A1 20050824 (EN)**

Application

**EP 04003803 A 20040219**

Priority

EP 04003803 A 20040219

Abstract (en)

A method is disclosed for heating a cold worked sheet of superplastically formable metal composition to recrystallize its microstructure to a formable condition and/or to heat the sheet to a temperature for an immediate forming operation. The sheet is placed between two electrical resistance heated platens maintained at a suitable temperature for recrystallizing and/or heating the metal sheet through its side surfaces. In a preferred embodiment a critical gap is maintained between the platens and the sheet to permit rapid conductive heating of the expanding sheet without marring its surfaces.

IPC 1-7

**C22F 1/047**; B21D 26/02

IPC 8 full level

**C22F 1/04** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP)

**C22F 1/04** (2013.01); **C22F 1/047** (2013.01)

Citation (search report)

- [Y] US 6547895 B2 20030415 - BRADLEY JOHN ROBERT [US], et al
- [Y] US 6211497 B1 20010403 - MATSEN MARC R [US], et al

Cited by

EP2182081A1; US2017144207A1; WO2010048950A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 1566462 A1 20050824**; **EP 1566462 B1 20120328**

DOCDB simple family (application)

**EP 04003803 A 20040219**