

Title (en)  
Rolling group for high reductions

Title (de)  
Walzgruppe für grosse Stärkenabnahmen

Title (fr)  
Groupe de laminoirs pour hautes réductions

Publication  
**EP 0692320 A1 19960117 (EN)**

Application  
**EP 95110406 A 19950704**

Priority  
IT UD940120 A 19940711

Abstract (en)  
Universal rolling-mill of the type with rolling rollers on planetary system, involving four opposite planetary wheels (1,2,3,4), identical and symmetric, each comprising a solar wheel that bears satellites rolling-mill rollers (r), characterized in that: two planetary couples of opposite rolling are used which rotation axis lie on the same orthogonal plane as or substantially adjacent to the laminate to be reduced; said satellites rolling-mill rollers of each planetary system, are spaced out with a value such to allow the orthogonal rolling-mill interference to not be in the same plane as satellites rolling-mill rollers of the other couple; a planetary couple is in staggered synchronism in the rotation for the rolling; in such a way that in a single rolling phase one has the rolling alternation of the respective satellites rolling-mill rollers of the opposite couples as in a gear, causing the laminate to undergo some progressive reductions of orthogonal section in an orthogonal way also alternating, during the contemporary, but staggered, rotation of said opposite planetary couples. <MATH>

IPC 1-7  
**B21B 13/20**; **B21B 13/10**

IPC 8 full level  
**B21B 13/10** (2006.01); **B21B 13/20** (2006.01); **B21B 1/08** (2006.01); **B21B 35/12** (2006.01)

CPC (source: EP)  
**B21B 13/103** (2013.01); **B21B 13/20** (2013.01); **B21B 1/08** (2013.01); **B21B 35/12** (2013.01); **B21B 2013/106** (2013.01)

Citation (search report)

- [XY] DE 1813331 A1 19700625 - SIEMAG SIEGENER MASCHINENBAU
- [XY] US 4193282 A 19800318 - WILSON ALEXANDER I [GB]
- [XA] DE 1452143 A1 19690102 - WTZ FEIKERAMISCHEN IND
- [XA] EP 0156151 A1 19851002 - SIDERURGIE FSE INST RECH [FR]
- [XY] "Les Laminoirs Planétaires Sendzimir", LA TECHNIQUE MODERNE, vol. 46, no. 11, pages 433 - 438
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 14 (M - 352) 22 January 1985 (1985-01-22)

Cited by  
DE102020209135A1; WO2012119166A1

Designated contracting state (EPC)  
BE DE ES FR GB SE

DOCDB simple family (publication)  
**EP 0692320 A1 19960117**; IT 1267270 B1 19970128; IT UD940120 A0 19940711; IT UD940120 A1 19960111

DOCDB simple family (application)  
**EP 95110406 A 19950704**; IT UD940120 A 19940711