

Title (en)  
METHOD OF FABRICATING SOLAR CELLS.

Title (de)  
HERSTELLUNGSVERFAHREN VON SONNENZELLEN.

Title (fr)  
PROCEDE DE FABRICATION DE CELLULES SOLAIRES.

Publication  
**EP 0165990 A4 19890119 (EN)**

Application  
**EP 85900536 A 19841214**

Priority  
• US 56313283 A 19831219  
• US 66697384 A 19841031  
• US 68149884 A 19841213

Abstract (en)  
[origin: WO8502943A1] A solar cell fabrication procedure in which a hydrogen ion passivation step is used to form, inter alia, an altered silicon substrate surface layer (18) to which immersion plated nickel (20) will not readily adhere. The altered surface layer is formed by shadow casting an ion beam (16) in a pattern corresponding to the desired front surface interelectrode configuration.

IPC 1-7  
**H01L 31/18**

IPC 8 full level  
**H01L 31/0224** (2006.01); **H01L 31/068** (2012.01); **H01L 31/18** (2006.01)

CPC (source: EP)  
**H01L 31/022425** (2013.01); **H01L 31/068** (2013.01); **H01L 31/1804** (2013.01); **Y02E 10/547** (2013.01); **Y02P 70/50** (2015.11)

Citation (search report)  
• [AD] US 4321283 A 19820323 - PATEL KIRIT B, et al  
• [A] APPLIED PHYSICS LETTERS, vol. 42, no. 7, 1st April 1983, pages 618-620, American Institute of Physics, New York, US; J.I. HANOKA et al.: "Hydrogen passivation of defects in silicon ribbon grown by the edge-defined film-fed growth process"  
• [A] APPLIED PHYSICS LETTERS, vol. 36, no. 10, 15th May 1980, pages 831-833, American Institute of Physics, New York, US; C.H. SEAGER et al.: "Improvement of polycrystalline silicon solar cells with grain-boundary hydrogenation techniques"  
• [A] SOLID-STATE ELECTRONICS, vol. 24, no. 4, April 1981, pages 337-342, Pergamon Press Ltd, Exeter, GB; A.A. ENGLAND et al.: "The use of ion-bombardment for plating metal contacts onto semiconductors"  
• See references of WO 8502943A1

Designated contracting state (EPC)  
FR

DOCDB simple family (publication)  
**WO 8502943 A1 19850704**; AU 3889085 A 19850712; AU 573696 B2 19880616; CH 668861 A5 19890131; DE 3490611 T1 19851128; EP 0165990 A1 19860102; EP 0165990 A4 19890119; GB 2162998 A 19860212; GB 2162998 B 19870930; GB 8516878 D0 19850807; NL 8420337 A 19851101; SE 456626 B 19881017; SE 8503835 D0 19850816; SE 8503835 L 19850816

DOCDB simple family (application)  
**US 8402066 W 19841214**; AU 3889085 A 19841214; CH 359785 A 19841214; DE 3490611 T 19841214; EP 85900536 A 19841214; GB 8516878 A 19841214; NL 8420337 A 19841214; SE 8503835 A 19850816