

Title (en)  
SHALLOW-HOMOJUNCTION SOLAR CELLS.

Title (de)  
SOLARZELLEN MIT OBERFLÄCHLICHEM HOMOÜBERGANG.

Title (fr)  
CELLULES SOLAIRES A HOMOJONCTION SUPERFICIELLE.

Publication  
**EP 0011629 A4 19801017 (EN)**

Application  
**EP 79900329 A 19791023**

Priority  
US 88907878 A 19780322

Abstract (en)  
[origin: WO7900813A1] Improvements in shallow-homojunction solar cells based upon a plurality of layers of a direct gap semi conductor material such as GaAs, as well as their fabrication, are disclosed. The shallow-homojunction solar cells have a n+/p/p+ structure (26, 24, 22) in which the n+ top layer (26) is limited to a thickness which permits significant carrier generation to occur in a lower semiconductor layer (24). An antireflection coating (28) is applied over the n+ top layer (26), and a particularly preferred method for applying the antireflection coating is by anodization. These solar cells can be grown on relatively inexpensive substrates, if desired, such as silicon or germanium.

IPC 1-7  
**H01L 31/04**; H01L 31/06; C25D 5/00; C25D 11/32

IPC 8 full level  
**H01L 31/04** (2006.01); **H01L 31/068** (2012.01)

CPC (source: EP)  
**H01L 31/068** (2013.01); **Y02E 10/547** (2013.01)

Citation (search report)  
US 3758348 A 19730911 - WHIGHAM D, et al

Cited by  
US10839960B2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 7900813 A1 19791018**; CA 1137604 A 19821214; EP 0011629 A1 19800611; EP 0011629 A4 19801017; JP S55500168 A 19800327; SE 439079 B 19850528; SE 7909584 L 19791120

DOCDB simple family (application)  
**US 7900181 W 19790321**; CA 324090 A 19790322; EP 79900329 A 19791023; JP 50056879 A 19790321; SE 7909584 A 19791120