

Title (en)

PROCESS FOR PRODUCING POLYCRYSTALLINE SILICON

Title (de)

VERFAHREN ZUR HERSTELLUNG VON POLYKRISTALLINEM SILICIUM

Title (fr)

PROCÉDÉ DE PRÉPARATION DE SILICIUM POLYCRISTALLIN

Publication

**EP 3102539 A1 20161214 (DE)**

Application

**EP 15701014 A 20150122**

Priority

- DE 102014201893 A 20140203
- EP 2015051284 W 20150122

Abstract (en)

[origin: WO2015113894A1] The invention relates to a method for producing polycrystalline silicon. A reaction gas containing a silicon-containing component and hydrogen is introduced into a reactor which comprises at least one support body made of silicon, said support body being heated by a direct passage of current. The silicon-containing component is decomposed, and polycrystalline silicon is deposited on the at least one support body. The invention is characterized in that the at least one support body made of silicon has an oxide layer which is removed before starting to deposit the polycrystalline silicon on the at least one support body, and the at least one support body is heated to a temperature of 1100-1200 °C and exposed to an atmosphere containing hydrogen at a pressure of 0.1 to 5 bar, wherein a flushing gas containing hydrogen is introduced into the reactor.

IPC 8 full level

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**H01L 21/02532** (2013.01 - US); **H01L 21/02595** (2013.01 - US); **H01L 21/0262** (2013.01 - US)

Citation (search report)

See references of WO 2015113894A1

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DOCDB simple family (publication)

**WO 2015113894 A1 20150806**; CA 2938453 A1 20150806; CA 2938453 C 20180102; CN 105980304 A 20160928; CN 105980304 B 20180209;  
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KR 101895700 B1 20180905; KR 20160117589 A 20161010; MY 176276 A 20200727; TW 201531602 A 20150816; TW I546426 B 20160821;  
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