

Title (en)

RAPID ON CHIP VOLTAGE GENERATION FOR LOW POWER INTEGRATED CIRCUITS

Title (de)

SCHNELLE SPANNUNGSERZEUGUNG AUF DEM CHIP FÜR INTEGRIERTE SCHALTUNGEN NIEDRIGER LEISTUNG

Title (fr)

GENERATION RAPIDE DE TENSION DANS LE MICROCIRCUIT DANS LE CAS DE CIRCUITS INTEGRES COURANT FAIBLE

Publication

EP 1151365 A4 20020130 (EN)

Application

EP 98960305 A 19981118

Priority

US 9824766 W 19981118

Abstract (en)

[origin: WO0029919A1] An on chip voltage generation circuit is provided for use on integrated circuits such as flash memory devices with a low power supply voltage. The voltage generation circuit comprises first and second level detectors (209 and 210) and a boost driver (204), wherein the voltage generation circuit pumps charge at first and second rates in response to outputs of the detectors.

IPC 1-7

G05F 1/10; **G05F 3/02**; **H01L 27/02**; **G11C 5/14**; **G05F 3/20**; **G05F 1/46**

IPC 8 full level

B60K 20/00 (2006.01); **C08G 59/06** (2006.01); **F02M 61/10** (2006.01); **G05F 1/10** (2006.01); **G05F 1/46** (2006.01); **G05F 3/02** (2006.01); **G05F 3/20** (2006.01); **G11C 5/14** (2006.01); **G11C 11/407** (2006.01); **G11C 11/413** (2006.01); **G11C 16/06** (2006.01); **H01L 21/822** (2006.01); **H01L 27/02** (2006.01); **H01L 27/04** (2006.01)

IPC 8 main group level

G05F (2006.01)

CPC (source: EP)

G05F 1/46 (2013.01)

Citation (search report)

- [X] US 5708387 A 19980113 - CLEVELAND LEE E [US], et al
- [A] EP 0810720 A2 19971203 - OKI ELECTRIC IND CO LTD [JP]
- See references of WO 0029919A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 0029919 A1 20000525; CN 1148621 C 20040505; CN 1327552 A 20011219; DE 69823888 D1 20040617; DE 69823888 T2 20041021; EP 1151365 A1 20011107; EP 1151365 A4 20020130; EP 1151365 B1 20040512; HK 1042954 A1 20020830; JP 2003517719 A 20030527; JP 4394835 B2 20100106

DOCDB simple family (application)

US 9824766 W 19981118; CN 98814368 A 19981118; DE 69823888 T 19981118; EP 98960305 A 19981118; HK 02104437 A 20020613; JP 2000582864 A 19981118