Title (en)

REGULATED VOLTAGE SUPPLY CIRCUIT FOR INDUCING TUNNELING CURRENT IN FLOATING GATE MEMORY DEVICES

Title (de)

REGULIERTE SPEISESPANNUNGSSCHALTUNG ZUR INDUKTION VON TUNNELSTROM IN FLOATING GATE SPEICHERZELLEN

Title (fr)

CIRCUIT D'ALIMENTATION A COURANT REGULE DESTINE A INDUIRE UN COURANT TUNNEL DANS DES DISPOSITIFS MEMOIRE A GRILLE FLOTTANTE

Publication

EP 1125298 A4 20030507 (EN)

Application

EP 98943549 A 19980903

Priority

US 9818548 W 19980903

Abstract (en)

[origin: WO0014747A1] A circuit is provided for applying a negative voltage (NVPP) to the control gate of a floating gate memory cell (10) and a positive voltage to the source drain or channel which comprises a positive voltage source to provide a positive voltage to the source (13) of the cell, and a negative voltage source responsive to the supply voltage to provide a negative voltage to the control gate. A voltage regulator (21) is included that is coupled to the negative voltage source and to the positive voltage source to maintain the negative voltage at a level responsive to the source voltage. The regulator maintains the negative voltage in response to the source voltage so that the electric field remains essentially constant over a range of values of source voltage.

IPC 1-7

G11C 7/00; G11C 16/04

IPC 8 full level

G11C 16/06 (2006.01); **G11C 5/14** (2006.01); **G11C 16/02** (2006.01); **G11C 16/12** (2006.01); **G11C 16/30** (2006.01)

CPC (source: EP)

G11C 5/147 (2013.01); **G11C 16/12** (2013.01); **G11C 16/30** (2013.01)

Citation (search report)

- [A] US 5532915 A 19960702 - PANTELAKIS DIMITRIS [US], et al
- See references of WO 0014747A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 0014747 A1 20000316; CN 1255813 C 20060510; CN 1367927 A 20020904; EP 1125298 A1 20010822; EP 1125298 A4 20030507; JP 2003522363 A 20030722; JP 4074748 B2 20080409

DOCDB simple family (application)

US 9818548 W 19980903; CN 98814235 A 19980903; EP 98943549 A 19980903; JP 2000569405 A 19980903