

Title (en)
METHOD OF ONO INTEGRATION INTO LOGIC CMOS FLOW

Title (de)
VERFAHREN ZUR ONO-INTEGRATION IN EINE LOGISCHE CMOS-STRÖMUNG

Title (fr)
PROCÉDÉ D'INTÉGRATION ONO DANS UN FLUX CMOS LOGIQUE

Publication
EP 2831918 A4 20151118 (EN)

Application
EP 13767491 A 20130313

Priority
• US 20121343437 A 20120329
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Abstract (en)
[origin: WO2013148196A1] An embodiment of a method of integration of a non-volatile memory device into a logic MOS flow is described. Generally, the method includes: forming a pad dielectric layer of a MOS device above a first region of a substrate; forming a channel of the memory device from a thin film of semiconducting material overlying a surface above a second region of the substrate, the channel connecting a source and drain of the memory device; forming a patterned dielectric stack overlying the channel above the second region, the patterned dielectric stack comprising a tunnel layer, a charge-trapping layer, and a sacrificial top layer; simultaneously removing the sacrificial top layer from the second region of the substrate, and the pad dielectric layer from the first region of the substrate; and simultaneously forming a gate dielectric layer above the first region of the substrate and a blocking dielectric layer above the charge-trapping layer.

IPC 8 full level
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• See also references of WO 2013148196A1

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WO 2013148196 A1 20131003; CN 104321877 A 20150128; CN 104321877 B 20180914; CN 108899273 A 20181127; CN 108899273 B 20240209; EP 2831918 A1 20150204; EP 2831918 A4 20151118; EP 3166147 A2 20170510; EP 3166147 A3 20170816; EP 3866199 A1 20210818; JP 2015512567 A 20150427; JP 6328607 B2 20180523; KR 102079835 B1 20200220; KR 20150105186 A 20150916; KR 20190082327 A 20190709; TW 201347150 A 20131116; TW 201743437 A 20171216; TW I599020 B 20170911; TW I648843 B 20190121

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