

Title (en)
ORGANIC FIELD EFFECT TRANSISTOR GATE

Title (de)
GATTER AUS ORGANISCHEN FELDEFFEKTTTRANSISTOREN

Title (fr)
PORTE CONSTITUEE DE TRANSISTORS A EFFET DE CHAMP ORGANIQUES

Publication
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Application
EP 05850139 A 20051206

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Abstract (en)
[origin: WO2006061000A2] The invention relates to an electronic component, especially an RFID transponder that comprises at least one logic gate (3). Said logic gate (3) is constituted of a plurality of layers applied to a common substrate (10). The layers comprise at least two electrode layers, at least one, especially organic, semiconductor layer (13, 23) applied from a liquid, and an insulating layer (14, 24) and are configured in such a manner that the logic gate comprises at least two differently structured field effect transistors (1, 2). Said field effect transistors (1, 2) are configured from a plurality of functional layers that can be applied to a carrier substrate (10) by a printing or doctor blade process.

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H01L 27/28 (2006.01); **H01L 51/10** (2006.01)

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H10K 19/20 (2023.02 - EP US)

Citation (search report)
See references of WO 2006061000A2

Citation (examination)
• CRONE B ET AL: "LARGE-SCALE COMPLEMENTARY INTERGRATED CIRCUITS BASED ON ORGANIC TRANSISTORS", NATURE, NATURE PUBLISHING GROUP, LONDON, GB, vol. 403, 3 February 2000 (2000-02-03), pages 521 - 523, XP000929929, ISSN: 0028-0836, DOI: DOI:10.1038/35000530
• A. DODABALAPUR: "Complementary circuits with organic transistors", APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, US, vol. 69, no. 27, 30 December 1996 (1996-12-30), pages 4227 - 4229, XP012016952, ISSN: 0003-6951, DOI: DOI:10.1063/1.116953

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