Title (en)

PATHOGEN-RESISTANT TRANSGENIC PLANT

Title (de)

PATHOGENRESISTENTE TRANSGENE PFLANZE

Title (fr)

PLANTE TRANSGÉNIQUE RÉSISTANTE AUX PATHOGÈNES

Publication

EP 2820137 A1 20150107 (DE)

Application

EP 13714189 A 20130226

Priority

- DE 102012003848 A 20120229
- DE 2013000098 W 20130226

Abstract (en)

[origin: CA2865208A1] The present invention provides pathogen-resistant transgenic plants which exhibit a resistance protein-mediated pathogen defence reaction in a cell of the plant under stringent control owing to a pathogen infection. In this case, as inducer of the pathogen defence, parts of avirulence proteins are used, the stable integration of which is possible by means of usual transformation methods. In addition, the invention relates to a composition of nucleic acids which, after integration into the genome of a plant, mediates the pathogen resistance therein, to a method for producing a pathogen-resistant plant, and to plants for producing a pathogen-resistant plant.

IPC 8 full level

C12N 15/82 (2006.01); **A01H 5/00** (2006.01)

CPC (source: EP US)

C12N 15/8239 (2013.01 - US); **C12N 15/8263** (2013.01 - EP US); **C12N 15/8279** (2013.01 - EP US); **C12N 15/8282** (2013.01 - EP US)

Citation (search report)

See references of WO 2013127379A1

Citation (examination)

- WO 9832325 A1 19980730 - DNA PLANT TECHN CORP [US]
- DE 10318644 A1 20031224 - ICON GENETICS AG [DE]
- BURGESS D G ET AL: "A novel, two-component system for cell lethality and its use in engineering nuclear male-sterility in plants", THE PLANT JOURNAL, BLACKWELL SCIENTIFIC PUBLICATIONS, OXFORD, GB, vol. 31, no. 1, 1 January 2002 (2002-01-01), pages 113 - 125, XP002348770, ISSN: 0960-7412, DOI: 10.1046/J.1365-313X.2002.01330.X
- WLADIMIR I L TAMELING ET AL: "Resistance proteins: scouts of the plant innate immune system", EUROPEAN JOURNAL OF PLANT PATHOLOGY, KLUWER ACADEMIC PUBLISHERS, DO, vol. 121, no. 3, 27 September 2007 (2007-09-27), pages 243 - 255, XP019603291, ISSN: 1573-8469
- PETIT-HOUDENOT YOHANN ET AL: "Complex Interactions between Fungal Avirulence Genes and Their Corresponding Plant Resistance Genes and Consequences for Disease Resistance Management", FRONTIERS IN PLANT SCIENCE, vol. 8, 16 June 2017 (2017-06-16), ISSN: 1664-462X
- BIANCA C. GOUVEIA ET AL: "Immune Receptors and Co-receptors in Antiviral Innate Immunity in Plants", FRONTIERS IN MICROBIOLOGY, vol. 7, 5 January 2017 (2017-01-05), XP055417500, DOI: 10.3389/fmicb.2016.02139

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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