

Title (en)

PROCESS OF CONTROLLED SHUFFLING OF CHROMOSOME FRAGMENTS FOR PLANT BREEDING

Title (de)

VERFAHREN ZUM KONTROLLIERTEN SHUFFLING VON CHROMOSOMALEN FRAGMENTEN FÜR PFLANZENZUCHT

Title (fr)

PROCEDE DE REARRANGEMENT CONTROLE DE FRAGMENTS DE CHROMOSOMES EN VUE DE LA SELECTION DE PLANTES

Publication

EP 1399573 A2 20040324 (EN)

Application

EP 02754783 A 20020627

Priority

- DE 10131690 A 20010629
- EP 0207134 W 20020627

Abstract (en)

[origin: WO03001900A2] Disclosed is a method of constructing a wild-species genomic library of chromosome fragments incorporated in a crop-species genome. First, a number of transformants for donor and recipient plant species is produced, carrying the DNA constructs necessary for the exchange of chromosomal fragments mediated by site-specific recombination. The donor and recipient are chosen such that, upon sexual cross or somatic cell fusion, they produce unstable progeny or demonstrate preferential segregation or sorting out. Second, the crossing between donor and recipient species and formation of chromosomal recombinants of donor and recipient plant species is induced. Third, taking advantage of the instability of hybrids between donor and recipient, recombinant cells and plants of the recipient are selected which contain specific chromosome fragments of the donor species. Also disclosed are transgenic plants, libraries and breeding material produced by the methods.

IPC 1-7

C12N 15/82; **C12N 15/10**; **A01H 1/02**; **A01H 5/00**

IPC 8 full level

C12N 15/10 (2006.01)

CPC (source: EP)

C12N 15/1027 (2013.01)

Citation (search report)

See references of WO 03001900A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 03001900 A2 20030109; **WO 03001900 A3 20031211**; CA 2445457 A1 20030109; DE 10131690 A1 20030116; EP 1399573 A2 20040324

DOCDB simple family (application)

EP 0207134 W 20020627; CA 2445457 A 20020627; DE 10131690 A 20010629; EP 02754783 A 20020627