

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

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- 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.

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