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(54) **FLOURY 2 GENE-SPECIFIC ASSAY IN MAIZE FOR FLOURY (FL2) TRAIT INTROGRESSION**

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(58) **Field of Classification Search**
None
See application file for complete search history.

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(57) **ABSTRACT**

The disclosure concerns compositions and methods for determining the zygosity of corn plants containing one or more floury2 (fl2) mutations. In embodiments, the disclosure concerns a gene specific PCR-based molecular (KASPar®) assay for identifying the floury2 trait in plants. In certain embodiments, compositions and methods are disclosed for determining the zygosity of corn plants with respect to the fl2 allele. In particular embodiments, the assay may be used for fl2 germplasm identification, accelerating introgression and molecular breeding programs in corn and other plants.

17 Claims, 18 Drawing Sheets