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(71) Applicant *(for all designated States except US)*: **MINOS BIOSYSTEMS LIMITED** [GB/GB]; Jubilee House Farm, Spen Green, Smallwood, Sandbach, Cheshire CW11 2XB (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CRAIG, Roger** [GB/GB]; Jubilee House Farm, Spen Green, Smallwood, Sandbach, Cheshire CW11 2XB (GB). **SAVAKIS, Charalambos** [GR/GR]; IMBB-Forth, P.O. Box 1527, GR-711 10 Heraklion (GR). **GROSVELD, Frank** [NL/NL]; Maaike Weezenaar Straat 27, NL-3065 GE Rotterdam (NL).

(74) Agents: **FURLONG, Isla, Jane** et al.; D Young & Co, 21 New Fetter Lane, London EC4A 1DA (GB).

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(54) Title: GENETIC MANIPULATION METHOD

(57) Abstract: A method of inducing transposition in a transgenic embryo is described, comprising the steps of (a) generating a first adult transgenic organism comprising within its genome one or more copies of a transposon; (b) generating a second adult transgenic organism comprising within its genome one or more copies of a gene encoding a transposase cognate for said transposon and/or a sequence capable of regulating expression of said gene encoding the transposase; (c) crossing the first adult transgenic organism with the second transgenic adult organism to provide a progeny which comprises, in the genome of one or more of its cells, both (i) one or more copies of the transposon and (ii) a gene encoding a transposase cognate for said transposon, wherein the gene encoding the transposase is under the control of one or more inducible regulatory sequences which permit expression of the transposase, and (d) inducing expression of said gene encoding the transposase in said embryo to cause mobilisation of said transposon within at least a portion of the tissues or cells of the progeny. Using the method, mobilisation of a transposon can advantageously be induced at predetermined stages of development of an embryo and the mutated gene of a single cell may be replicated in subsequent cell divisions, resulting in groups of cells which are essentially homogeneous for the transposed gene.