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(54) Title: METHOD OF ENUCLEATION AND OOCYTE ACTIVATION IN SOMATIC CELL NUCLEAR TRANSFER IN PRIMATES

(57) Abstract: The present invention relates to a method for cell enucleation, comprising removal of the spindle body from a cell in metaphase with a minimal amount of cytoplasm from the cell, said method comprising using polarized light microscopy for visualization of the spindle body during cell enucleation. The present invention also relates to a method for production of an activated reconstructed vertebrate cell, said method comprising: a) culturing a reconstructed vertebrate cell for about 1.5 to about 3 hours after being reconstructed; b) applying at least one electrical pulse to the reconstructed cell; c) culturing the reconstructed cell for about a further 2 hours; and d) treating the reconstructed cell with a chemical activator. The methods of the invention find application in the preparation of totipotent or pluripotent cells of substantially identical genotype, as well as the cloning of vertebrates.



WO 2005/005624 A1