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ACTION

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(54) Title: MICROINJECTION ASSEMBLY AND METHODS FOR MICROINJECTING AND REIMPLANTING AVIAN EGGS

(57) Abstract: The present invention provides a microinjection assembly including a microscope, a microinjection system comprising a micromanipulator, a micropipette and a piezo-electric oscillator, and an obliquely angled macro monitoring unit. The present invention also provides methods of microinjecting the germinal disk of an avian egg, thereby delivering a transgenic nucleus, spermatozoon or isolated nucleic acid to the avian embryo. The avian ovum may be returned to a female bird for hard-shell deposit and laying of the egg for hatching as a transfected bird.