

[54] CULTURING AND EMPLACEMENT OF DIFFERENTIATED CELLS IN VIVO

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[57] ABSTRACT

A method and culture solution are disclosed which enable in vivo emplacement of differentiated cells derived from in vitro culturing of differentiated cells, with significant retention of their differentiated character. In an alternative embodiment, in vivo culturing of differentiated cells is contemplated. Through the use of extracellular matrix fibers, specifically derived from connective tissue, as culture substrates, the method also discloses the isolation of the connective tissue fibers and their preparation as a culture substrate. This method provides significantly higher survival and attachment rates, and often significantly improved growth properties for in vivo or in vitro cultures of differentiated cells, especially epithelial, over the current methods for culturing these cells. This method also significantly enables certain differentiated cells to retain much of their normal enzymatic activities, and furthermore, this method enables certain differentiated cells to retain to a high degree, their ability to secrete substances, such as hormones.

22 Claims, No Drawings