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(54) **Title:** PHASE SEPARATED COMPOSITE



FIG. 5A



FIG. 5B



FIG. 5C

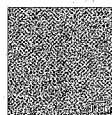


FIG. 5D

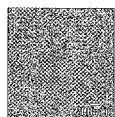


FIG. 5E



FIG. 5F

(57) **Abstract:** A composite is disclosed. The composite comprises a first conjugate of a polymer and a first phenol-containing moiety, and a second conjugate of a gelatin or collagen and a second phenol-containing moiety, wherein the polymer is selected so that the first conjugate is less cell-adhesive than the second conjugate, at least one of the first and second conjugates is crosslinked to form a matrix, and the composite comprises discrete regions that are rich in one of said first and second conjugates. A method of forming such composite is also disclosed. The method comprises mixing precursors for the first and second conjugates in a solution for forming said composite, and dispersing a catalyst in the solution to catalyze crosslinking of at least one of the first and second conjugates to form the matrix. The composite may be used to grow cells.

