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(54) Title: SCAFFOLD FOR CORNEAL REGENERATION AND METHOD FOR PRODUCING THE SAME

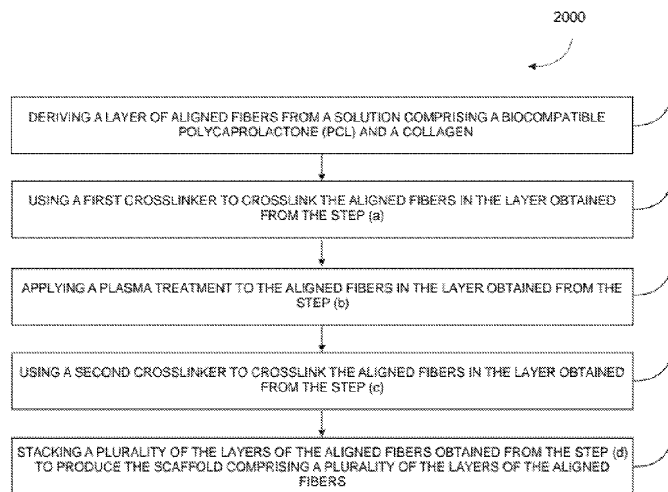


FIG. 20

(57) Abstract: Disclosed is a scaffold for corneal regeneration and a method to produce thereof. The scaffold includes at least one layer of aligned fibers. The aligned fibers include a biocompatible polycaprolactone (PCL) and a collagen. The PCL and collagen have a mass ratio in the range of 77:23 to 42:58. Each layer of the aligned fibers has a thickness that is preferably from 15 to 20 μm . The scaffold has various properties that include but are not limited to a visible light transmittance in the range of 50 to 95%; a tensile strength less than or equal to 19.1 MPa; and an elasticity modulus in the range of 1 MPa to 34 MPa.

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