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(54) Title: COMPOSITIONS AND METHODS FOR TREATING EXCESSIVE BLEEDING

(57) Abstract: The inventive material is a unique family of externally used wound sealants based upon a binding agent of reactive submicron silica particles that, when hydrated, agglomerate in the form of a supramolecular cross-linked network serving as the structural framework facilitating clot formation. A thrombolytic cascade accelerant can be provided, optionally with additional clotting factors, to further accelerate the clotting process.