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(71) Applicants and
(72) Inventors: **HUSS, Ralf** [DE/DE]; Tegernseer Strasse 78, 83666 Waakirchen (DE). **NELSON, Peter, Jon** [US/DE]; c/o Ludwig Maximilians Universität München, Schillerstrasse 42, 80336 München (DE).

(74) Agent: **GRUND, Martin**; Intellectual Property Group, Nikolaistrasse 15, 80802 Munich (DE).

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(54) **Title:** TISSUE INHIBITOR OF METALLOPROTEINASES (TIMP) LINKED TO GLYCOSYLPHOSPHATIDYLINOSITOL (GPI) -ANCHORS FOR TREATMENT OF CANCER AND SKIN LESIONS

(57) **Abstract:** The present invention relates to fusion constructs of glycosylphosphatidylinositol (GPI)- anchored tissue inhibitors of metalloproteinases (TIMPs) and their use for the treatment of cancer and in regenerative medicine. By this approach, the GPI-anchored TIMP proteins are incorporated into the surface membrane of tumor cells and render tumor cells sensitive to FAS-induced apoptosis. Furthermore, the fusion constructs of the present invention are effective agents useful in wound healing applications. In one embodiment, the TIMP is linked to mucin followed by GPI in order to enhance surface presentation. The use of GPI to link TIMP renders the resulting fusion protein particularly useful as an anti-cancer agent for the treatment of cancer, and, in particular, any residual cancer following an incomplete surgical resection of primary tumors in an individual.