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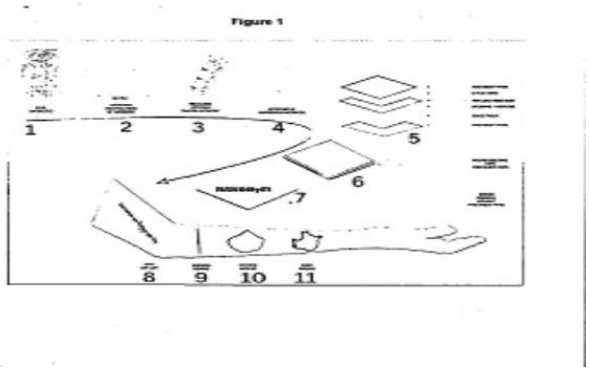
(57) Abstract :
The titled Nano Hydrofiber Scaffold (NanoHyFi) discloses about the wound healing using bio degradable scaffold which is essential to repair the skin after injury. The engineering of several nanoparticles to target the bacteria makes them a powerful candidate to encapsulated drugs for rapid wound healing process. Several resources contribute to the generation of nanoparticles ranging from 20 to 500 nm. Encapsulating the antibiotics or drugs into liposome would be highly efficient for wound care management. Hydrogel loaded antibiotics mimics the texture of tissues and deliver the antibiotics at the target sites. Gellan gum hydrogels have several unique properties such as higher biodegradability, increased water retaining capacity, lesser toxicity and clear gelling ability makes them a multifunctional candidate to be used to load various antibiotics and can be made as a wound dressing materials. Polyvinyl alcohol based liposomal hydrofiber was developed to restrict the entry of foreign pathogens and release the liposome loaded antibiotics to the wound site.



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