PATENT NO. 402928
COMPOSITION AND SYSTEM FOR TRANSDERMAL DELIVERY

APPLICATION NO. 201911042447

APPLICANT
Panjab University, Chandigarh

ABSTRACT
A transdermal composition for delivering macromolecular drugs or high molecular weight drugs with the assistance of microneedles is disclosed. The present invention provides transdermal composition for delivering a drug having a molecular weight greater than 5000 Daltons, the transdermal composition comprising a drug having a molecular weight greater than 5000 Daltons; naturally derived polymer, polyvinyl alcohol, polyethylene glycol, cross-linker, and water. A system for delivering the transdermal composition into the human body is also disclosed.

INVENTOR
Chhibber, Sanjay
Kumar, Ashutosh
Harjai, Kusum
Panjab University, Chandigarh

CLAIM 1

A transdermal composition for delivering a drug having molecular weight greater than 5000 Daltons, the transdermal composition comprising:
a drug having the molecular weight greater than 5000 Daltons;
chitosan in a range of between 4% to 6% w/v;
polyvinyl alcohol (PVA) in a range of between 3% to 5% w/v;
polyethylene glycol (PEG) in a range of between 3% to 5% w/v;
glutaraldehyde in a range of between 0.5% to 5% w/v; and
water in a range of between 79% to 87% w/v, wherein the transdermal composition forms a reservoir for the drug having molecular weight greater than 5000 Daltons.
The transdermal composition as claimed in claim 1, wherein the drug having a molecular weight greater than 5000 Daltons is insulin.