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(54) **BIFUNCTIONAL MOLECULES FOR DELIVERY OF THERAPEUTICS**

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(58) **Field of Search** 530/866, 867, 530/402, 391.1, 391.7; 514/12; 536/23.1; 435/7.1, 7.21, 69.7

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(57) **ABSTRACT**

A bifunctional molecule consisting of a therapeutic molecule and a ligand which specifically binds a transcytotic receptor can be transported specifically from the basolateral surface of epithelial cells to the apical surface. This approach provides the ability to deliver a therapeutic molecule directly to the apical surface of the epithelium, by targeting the transcytotic receptor with an appropriate ligand. Thus, the highest concentration of the therapeutic molecule will be at the apical surface, where it can have the greatest therapeutic effect.

16 Claims, 18 Drawing Sheets