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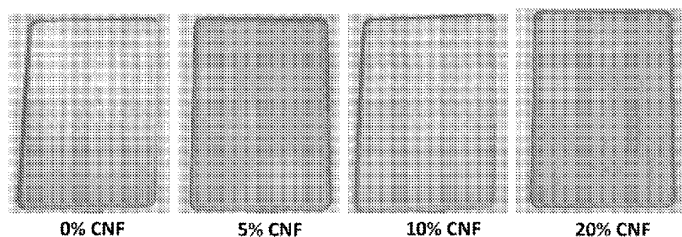


Fig. 1

(57) Abstract: Disclosed herein is a composite film, comprising proteins comprising keratin having a molecular weight of from 10 to 60 kDa, and a cellulose component selected from one or both of cellulose nanocrystals having a diameter of from 175 to 300 nm and cellulose nanofibrils having a diameter of from 50 to 100 nm, wherein the keratin and cellulose nanofibrils are distributed homogeneously within the film. Also disclosed herein are a delivery vehicle for agricultural products comprising an outer packaging formed by the aforementioned composite film, a degradable bag formed of the aforementioned composite film, and a method of making the aforementioned composite film.



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