



- (51) International Patent Classification:
C08J 5/18 (2006.01) *C09K 19/38* (2006.01)
C08J 5/22 (2006.01)
- (21) International Application Number:
PCT/EP2022/073629
- (22) International Filing Date:
24 August 2022 (24.08.2022)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
2112102.5 24 August 2021 (24.08.2021) GB
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(54) Title: METHOD FOR PREPARING STRUCTURALLY COLOURED FILMS AND PIGMENTS

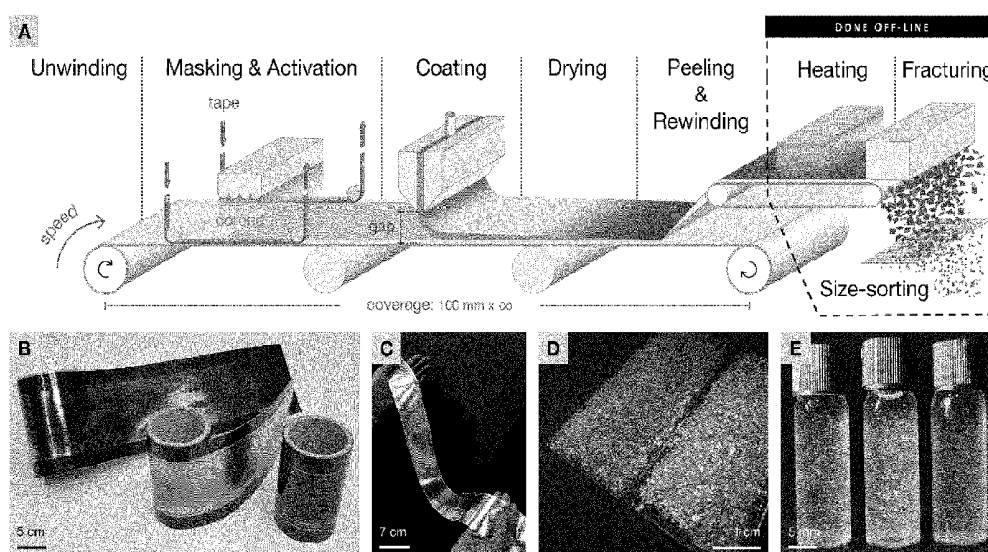


Figure 1

(57) Abstract: The invention relates to a method for producing structurally coloured films, particles and interference pigments comprising cellulose nanocrystals, such as neutralised cellulose nanocrystals. The films and particles can be used as interference pigments or coloured particles such as glitters for various applications. The method comprises steps of depositing a nanocrystal suspension comprising cellulose nanocrystals onto a substrate; spreading the nanocrystal suspension across the substrate using a spreader; ageing the nanocrystal suspension to partially or completely recover the cholesteric structures lost during deposition and spreading; drying the deposited nanocrystal suspension so that the nanocrystals self-assemble to form a structurally coloured film; and annealing the structurally coloured film to increase the water resistance of the film. The structurally coloured film comprises nanocrystals which are organized into chiral nematic structures to provide the structural colour.