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(12) **United States Patent**  
**Bristow**

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(54) **METHOD FOR PURIFYING EMAMECTIN BENZOATE AND COMPOSITIONS COMPRISING THE SAME**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(57) **ABSTRACT**

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A purification process of emamectin benzoate and compositions comprising the same. The method for purifying emamectin benzoate comprising steps (a): crystallizing emamectin benzoate in a mixture of polar solvent and non-polar solvent; isolating emamectin benzoate crystals; recovering the solvents by distillation; and recovering a crude emamectin benzoate from the solvents; (b): crystallizing emamectin benzoate crystals from step (a) in a polar aprotic solvent; isolating the crystals; recovering the solvents by distillation; and then collecting a crude emamectin benzoate from the solvents; (c): crystallizing emamectin benzoate crystals collected from step (b) in the mixture of polar solvent and non-polar solvent; isolating the crystals; recovering the solvents by distillation; and collecting a crude emamectin benzoate; wherein the purity of the crystals obtained from step (c) is 99%.

(51) **Int. Cl.**  
**C07D 493/22** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **C07D 493/22** (2013.01)

(58) **Field of Classification Search**  
CPC ..... C07D 493/22  
See application file for complete search history.

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**1 Claim, 1 Drawing Sheet**