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(54) Title: PROCESS FOR PREPARING ATAZANAVIR BISULFATE AND NOVEL FORMS

(57) Abstract: A process is provided for preparing the HIV protease inhibitor atazanavir bisulfate wherein a solution of atazanavir free base is reacted with concentrated sulfuric acid in an amount to react with less than about 15% by weight of the free base, seeds of Form A crystals of atazanavir bisulfate are added to the reaction mixture, and as crystals of the bisulfate form, additional concentrated sulfuric acid is added in multiple stages at increasing rates according to a cubic equation, to effect formation of Form A crystals of atazanavir bisulfate. A process is also provided for preparing atazanavir bisulfate as Pattern C material. A novel form of atazanavir bisulfate is also provided which is Form E3 which is a highly crystalline triethanolate solvate of the bisulfate salt from ethanol.

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