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(12) **United States Patent**
Bathe et al.

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(54) **POLYMORPHIC FORMS OF**
1-[4-(5-CYANOINDOL-3-YL)BUTYL]-4-(2-
CARBAMOYLBENZOFURAN-5-YL)
PIPERAZINE HYDROCHLORIDE

| | | | |
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Related U.S. Application Data

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(30) Foreign Application Priority Data

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C07D 405/14 (2006.01)

(52) **U.S. Cl.**
USPC **514/254.09; 544/373**

(58) **Field of Classification Search**
USPC 514/254.09; 544/373
See application file for complete search history.

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(57) ABSTRACT

The invention relates to new crystalline modifications of the hydrochloride of 1-[4-(5-cyanoindol-3-yl)butyl]-4-(2-carbamoyl-benzofuran-5-yl)-piperazine, crystalline modification of the dihydrochloride of 1-[4-(5-cyanoindol-3-yl)butyl]-4-(2-carbamoyl-benzofuran-5-yl)-piperazine and amorphous 1-[4-(5-cyanoindol-3-yl)butyl]-4-(2-carbamoyl-benzofuran-5-yl)-piperazine hydrochloride which are suitable in particular for the preparation of solid medicaments for the treatment or prevention of depressive disorders, anxiety disorders, bipolar disorders, mania, dementia, substance-related disorders, sexual dysfunctions, eating disorders, obesity, fibromyalgia, sleeping disorders, psychiatric disorders, cerebral infarct, tension, for the therapy of side-effects in the treatment of hypertension, cerebral disorders, chronic pain, acromegaly, hypogonadism, secondary amenorrhea, premenstrual syndrome and undesired puerperal lactation.

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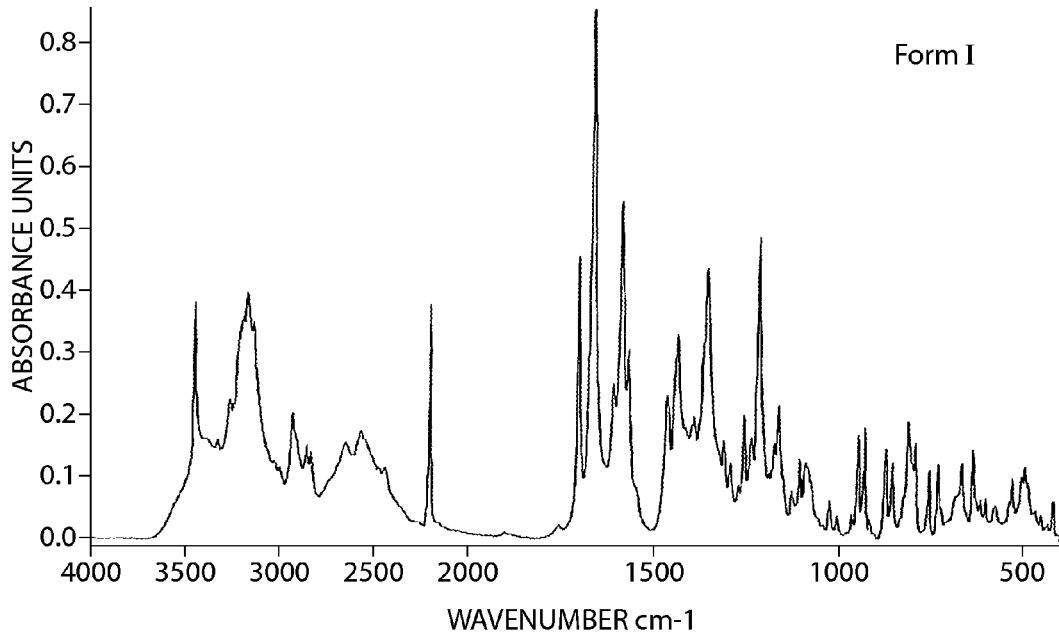


Fig. 1

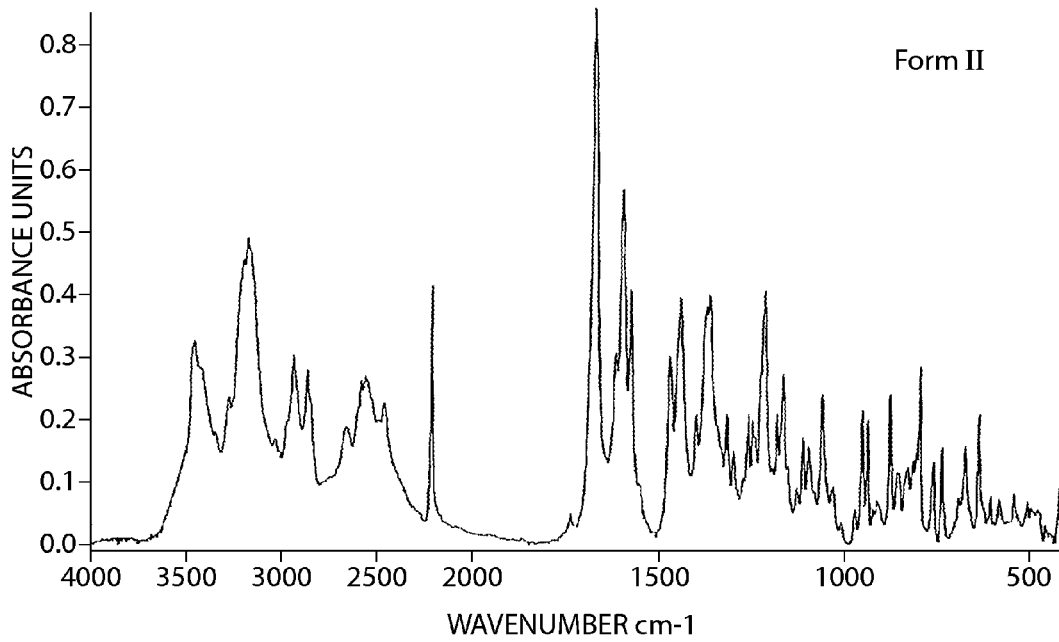


Fig. 2

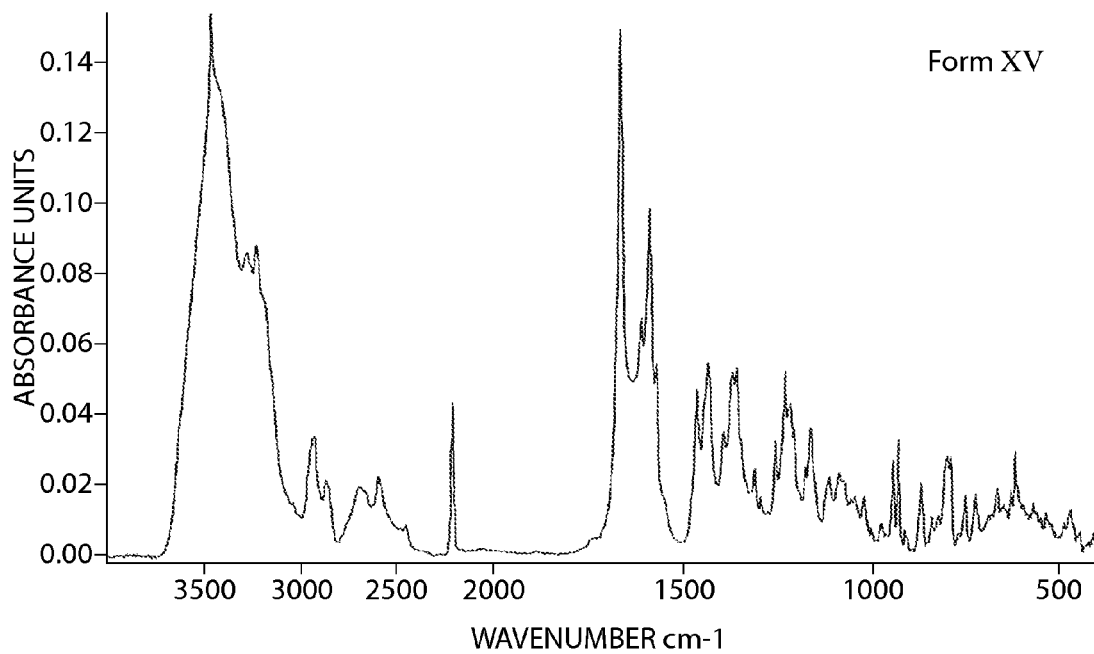


Fig. 3

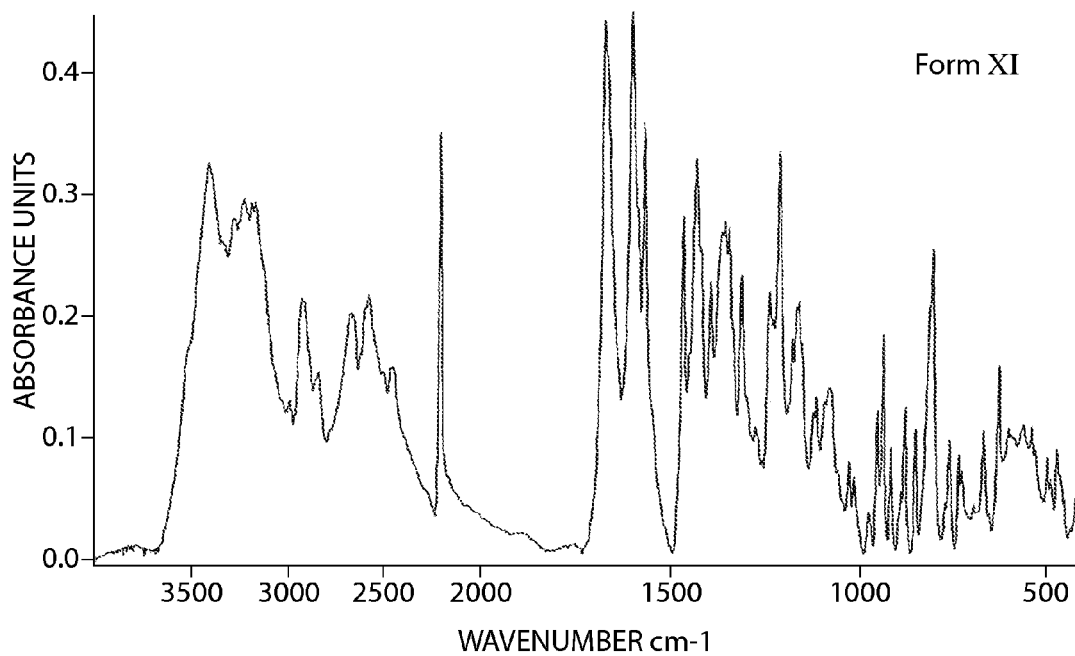


Fig. 4

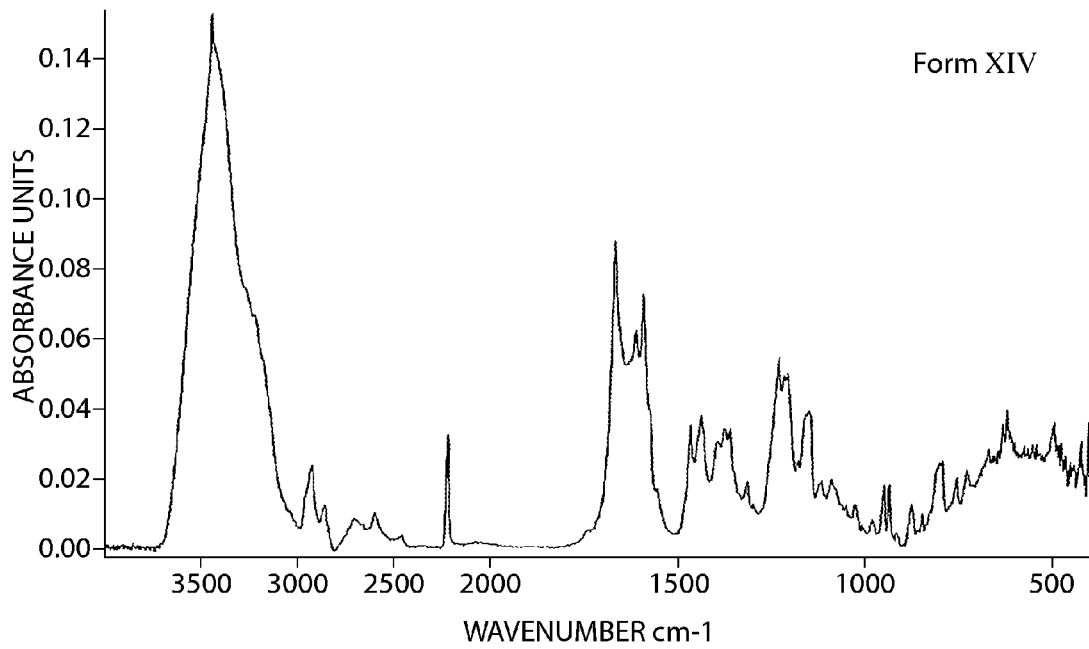


Fig. 5

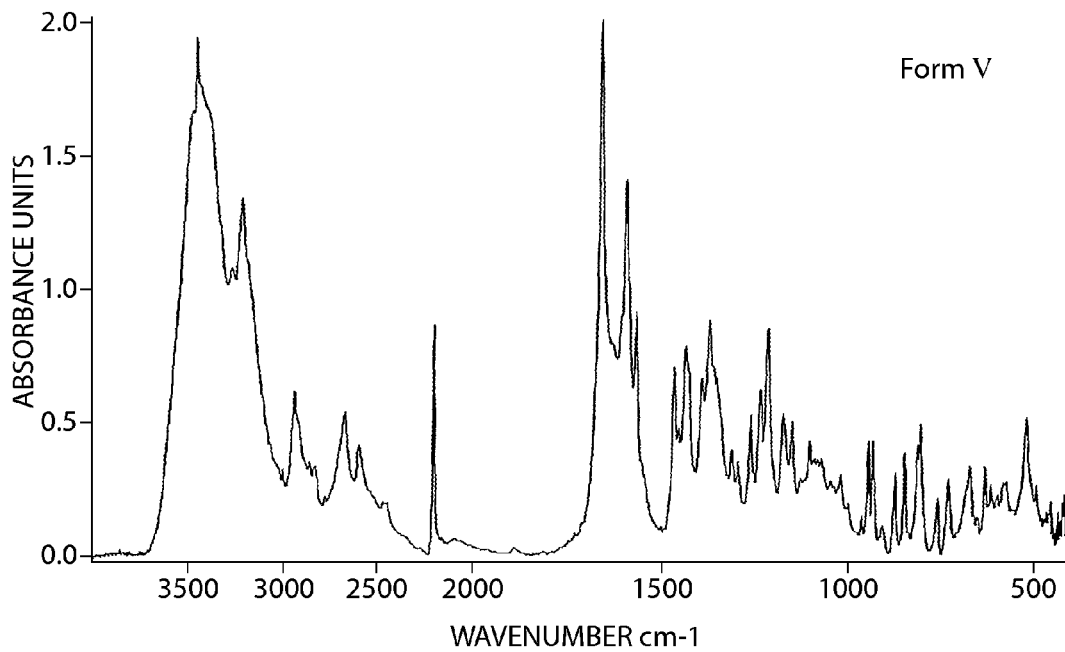


Fig. 6

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