

# United States Patent [19]

Berthet et al.

[11] Patent Number: **4,729,904**

[45] Date of Patent: \* **Mar. 8, 1988**

[54] **INERT CROSS-LINKED COPOLYMER SUPPORT, ITS PREPARATION PROCESS AND ITS USE FOR PRODUCING DELAYED ACTION MEDICAMENTS**

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[\*] Notice: The portion of the term of this patent subsequent to May 20, 2003 has been disclaimed.

[21] Appl. No.: **763,253**

[22] Filed: **Aug. 7, 1985**

#### Related U.S. Application Data

[62] Division of Ser. No. 525,404, Aug. 22, 1983, Pat. No. 4,590,068.

#### [30] Foreign Application Priority Data

Jun. 30, 1980 [FR] France ..... 80 14529

[51] Int. Cl.<sup>4</sup> ..... **A61K 9/22; A61K 31/78**

[52] U.S. Cl. .... **424/487; 424/81; 514/951**

[58] Field of Search ..... **424/81, 19; 514/951**

#### [56] References Cited

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#### [57] ABSTRACT

Inert cross-linked copolymer able to absorb and then progressively release a pharmaceutically active substance, wherein it is constituted by a powder of a cross-linked copolymer comprising

30 to 80% by weight of monounsaturated alkyl acrylate and/or methacrylate;

5 to 68% by weight of acrylic and/or methacrylic acid; and

2 to 15% by weight of bifunctional or trifunctional acrylate and/or methacrylate.

A mixture of monounsaturated alkyl acrylate and/or methacrylate, acrylic and/or methacrylic acid, and bifunctional or trifunctional acrylate and/or methacrylate monomers is polymerized in accordance with a free radical polymerization mechanism.

The support is used for the preparation of a delayed action or release medicament.

**11 Claims, 7 Drawing Figures**