US006277946B1

(12) **United States Patent**
van Heijkant et al.

(10) **Patent No.: US 6,277,946 B1**
(45) **Date of Patent: Aug. 21, 2001**

(54) **METHOD FOR PREPARATION OF POLYCARBONATES**

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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.

(21) Appl. No.: **09/567,826**

(22) Filed: **May 9, 2000**

(30) **Foreign Application Priority Data**

Feb. 18, 2000 (ES) 200000385

(51) **Int. Cl.**[7] **C08G 64/00**
(52) **U.S. Cl.** **528/196**; 528/198
(58) **Field of Search** 528/196

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Primary Examiner—Terressa M. Boykin

(57) **ABSTRACT**

A method is provided for the preparation of polycarbonates by the reaction of a diaryl carbonate, such as DPC and a dihydric phenol, such as BPA. The method utilizes the steps of successively processing the diaryl carbonate and the dihydric phenol in a melt in a first reaction stage, a second reaction stage and at least a first polymerization stage, and shifts the processing conditions such that the desired low viscosity/high end-cap product is obtained. This is achieved by having the ratio of diaryl carbonate to dihydric phenol in the melt prior to the first reaction stage greater than 1.08; and by controlling the temperature and residence time in the first polymerization stage to provide a polycarbonate product having a melt flow rate at 250° C. of greater than 10 g/min and an end-cap level of at least 90%. The method of the invention can be used in a linear manufacturing process, in which there is one product produced. The method of the invention can also be incorporated into a multi-line manufacturing process for the simultaneous production of more than one product. Thus, a stream of product produced from the first polymerization stage may be split into two or more lines which are further processed to produce, for example, a low viscosity, high end-cap product and a medium viscosity, moderate end-cap product.

15 Claims, 1 Drawing Sheet