

Title (en)  
APPARATUS FOR THE CONTINUOUS MODIFICATION OF POLYMERS IN THE FREE-FLOWING STATE BY MEANS OF ELECTRON RADIATION

Title (de)  
VORRICHTUNG ZUR KONTINUIERLICHEN MODIFIZIERUNG VON POLYMEREN IM FLIESSFÄHIGEN ZUSTAND MITTELS ELEKTRONENSTRAHLUNG

Title (fr)  
DISPOSITIF POUR MODIFIER EN CONTINU DES POLYMERES A ECOULEMENT LIBRE A L'AIDE D'UN RAYONNEMENT ELECTRONIQUE

Publication  
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Application  
**EP 06793235 A 20060905**

Priority

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- DE 102005048189 A 20050930

Abstract (en)  
[origin: WO2007039380A1] The invention relates to the field of polymer chemistry, more particularly an apparatus for continuously modifying polymers that can be processed into molded parts or semifinished products prior to, during, and following the modification process. The aim of the invention is to create an apparatus in which a melt is created and modified in a combined manner in a continuous process and which results in improved properties of the polymers. Said aim is achieved by an apparatus comprising a component for converting the polymers into the free-flowing state, a radiation shield for electron radiation, and cooling devices. A radiation device for electron radiation as well as feeding ducts and discharge ducts are provided inside the radiation shield. A molding device is provided inside the radiation shield while the free-flowing polymers are freely suspended in space in the radiation zone downstream from the molding device in case solid shaped and modified polymers are produced inside the radiation shield.

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