

Abstract**TITLE: POROUS FILM OF HIGH MOLECULAR WEIGHT POLYOLEFIN
AND PROCESS FOR PRODUCING SAME**

The present invention relates to a porous or microporous film of a high molecular weight polyolefin excellent in strength and air-permeability and suitable for use in filtering materials, separators for aqueous electrolyte batteries, separator films for batteries, separator films for electrolytic capacitors, and air-permeable films; for moisture-permeable water-proof use such as paper diapers and house-wrapping films; and for other uses such as cloths, package and printing, as well as a process for producing same. The feature of the present invention resides in an aspect that the film is composed of fibrils comprising extended-chain crystals and lamellar crystals and/or fibrils comprising helicoidal crystals.

This porous film of a high molecular weight polyolefin is produced by subjecting an air-impermeable film of a high molecular weight polyolefin to thermal treatment followed by, if necessary, a stretching treatment and/or a thermosetting treatment.