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MULTI-LAYER OPAQUE FILM STRUCTURES OF REDUCED
SURFACE FRICTION AND PROCESS FOR PRODUCING SAME

ABSTRACT

An opaque, biaxially oriented multi-layer polymeric film structure of reduced surface coefficient of friction. The film structure, includes: (a) a thermoplastic polymer matrix core layer having a first
5 surface and a second surface, within which is located a strata of voids; positioned at least substantially within a substantial number of the voids is at least one spherical void-initiating particle which is phase distinct and incompatible with the matrix material, the void space occupied by the particle being substantially less than the
10 volume of the void; the population of the voids in the core being such as to cause a significant degree of opacity; (b) at least one thermoplastic polymer intermediate layer having a first surface and a second surface, the second surface of the intermediate layer adhering to at least the first surface of the core layer, the intermediate
15 layer formed from a mixture comprising the thermoplastic polymer, a migratory slip agent and a migratory antistatic agent; and (c) a non-voided thermoplastic skin layer adhering to the first surface of the intermediate layer; wherein the slip agent and the antistatic agent migrate to the outer surface of the skin layer and are effective
20 to reduce the surface coefficient of friction thereof.

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