

Title (en)
METHOD OF MAKING METAL CONTAINERS

Publication
EP 0006957 B1 19841003 (EN)

Application
EP 78900302 A 19790606

Priority
• US 85185677 A 19771116
• US 85185977 A 19771116

Abstract (en)
[origin: WO7900297A1] A precoated stock material for use in forming a drawn and ironed container and a method of forming such container is disclosed herein. In the past, water soluble lubricants applied to the stock material during drawing and ironing had to be removed to produce an acceptable surface for subsequent coatings or decorations. This often involved use of harsh chemicals which, in some cases, involved potential health hazards. Recent efforts aimed at use of partially cured coatings containing lubricants applied prior to drawing and ironing have been unsuccessful in the sense that production rate is unacceptable and the coating is often removed during ironing. In this invention, the stock material initially has a layer of lubricant applied to at least one surface of the metal base with the lubricant consisting essentially of a Fatty acid ester of a mono or polyhydric alcohol and having a distribution of less than 0.5 mg./cm.² (3 mg./in.²). The method contemplates applying the layer of lubricant to a metal stock, such as aluminum, black plate or tinplate, cutting a disc from the metal stock, and transforming the disc into a drawn and ironed container without additional lubricant being applied to the tooling. In one version of the invention, a black plate stock material has a curable polymeric coating applied to one surface which is then partially cured and a layer of lubricant is applied to the other surface.

IPC 1-7
B21D 51/26; **B65D 25/14**; **C10M 3/20**

IPC 8 full level
B21D 22/28 (2006.01); **B21D 22/20** (2006.01); **B21D 51/26** (2006.01); **C10M 105/32** (2006.01)

CPC (source: EP)
B21D 22/201 (2013.01); **C10M 105/32** (2013.01); **C10M 2207/281** (2013.01); **C10M 2207/282** (2013.01); **C10M 2207/283** (2013.01); **C10M 2207/286** (2013.01); **C10N 2040/24** (2013.01); **C10N 2040/241** (2020.05); **C10N 2040/242** (2020.05); **C10N 2040/243** (2020.05); **C10N 2040/244** (2020.05); **C10N 2040/245** (2020.05); **C10N 2040/246** (2020.05); **C10N 2040/247** (2020.05)

Citation (examination)
• US 2575196 A 19511113 - SMITH JR PAUL V
• Comprehensive Chemistry
• The Penguin Dictionary of Science
• Reibung und Schmierung Fester Körper
• The Condensed Chemical Dictionary
• Praktische Chemie für Ingenieurberufe

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 7900297 A1 19790531; DE 2862444 D1 19841108; EP 0006957 A1 19800123; EP 0006957 A4 19800109; EP 0006957 B1 19841003; JP S54500094 A 19791213

DOCDB simple family (application)
US 7800146 W 19781114; DE 2862444 T 19781114; EP 78900302 A 19790606; JP 50014578 A 19781114