

US9457541B2 Copper foil for current collector of lithium secondary battery with improved wrinkle characteristics

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Abstract

A copper foil for a current collector of a lithium secondary battery has a crystalline structure, in which a ratio of the sum of texture coefficients of a (111) surface and a (200) surface to the total sum of texture coefficients of the (111), (200) and (220) surfaces is 60 to 85%, a ratio of the texture coefficient of the (111) surface to the total sum of texture coefficients of the (111), (200) and (220) is 18 to 38%, a ratio of the texture coefficient of the (200) surface thereto is 28 to 62%, and a ratio of the texture coefficient of the (220) surface thereto is 15 to 40%. The copper foil has surface roughness (Rz-JIS) of 2 μm or less, weight deviation of 3% or less, tensile strength of 30 to 40 kgf/mm², elongation of 3 to 20%, and thickness of 1 to 35 μm .