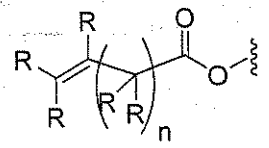
A Process for Making a Patterned Metal Oxide Structure

Abstract

There is provided a process for making a patterned metal oxide structure comprising the step of heating an imprint structure comprising a polymerized organometallic compound to remove organic material and thereby form the patterned metal oxide structure, wherein the imprint structure is formed by polymerizing a resist mixture comprising at least one olefinic polymerizable compound and a polymerizable organometallic compound having, e.g., at least one carboxylate of Formula 1:



Formula 1

wherein

n is 1-12; and

each R is independently selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, cycloakenyl, aryl, and aralkyl.

(Fig. 1)