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(12) **United States Patent**
Hatakeyama(10) **Patent No.:** **US 9,164,383 B2**
(45) **Date of Patent:** **Oct. 20, 2015**(54) **RESIST COMPOSITION AND PATTERNING PROCESS**2008/0015278 A1 1/2008 Malik et al.
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(73) Assignee: **SHIN-ETSU CHEMICAL CO., LTD.**,
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(30) **Foreign Application Priority Data**

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(2013.01); **G03F 7/0048** (2013.01); **G03F**
7/0757 (2013.01)(58) **Field of Classification Search**

None

See application file for complete search history.

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Primary Examiner — Cynthia H Kelly*Assistant Examiner* — Anna Malloy(74) *Attorney, Agent, or Firm* — Westerman, Hattori, Daniels & Adrian, LLP(57) **ABSTRACT**

A resist composition comprising a salt of a mono- to tetrafunctional carboxylic acid with a metal selected from magnesium, chromium, manganese, iron, cobalt, nickel, copper, zinc, silver, cadmium, indium, tin, antimony, cesium, zirconium, and hafnium, and a solvent is improved in film uniformity when coated, and exhibits a high resolution, high sensitivity, and minimal LER when processed by the EB or EUV lithography.

8 Claims, No Drawings