

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
21 July 2022 (21.07.2022)



(10) International Publication Number
WO 2022/155091 A1

(51) International Patent Classification:

C07F 11/00 (2006.01) C23C 16/18 (2006.01)
C07F 17/00 (2006.01) C23C 16/455 (2006.01)

(21) International Application Number:

PCT/US2022/011800

(22) International Filing Date:

10 January 2022 (10.01.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/146,886 12 January 2021 (12.01.2021) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

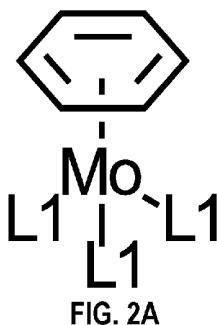
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: ARENE MOLYBDENUM (0) PRECURSORS FOR DEPOSITION OF MOLYBDENUM FILMS



(57) Abstract: Molybdenum(0) coordination complexes comprising an arene ligand and one or more neutral ligands which coordinate to the metal center by carbon, nitrogen or phosphorous are described. Methods for depositing molybdenum-containing films on a substrate are described. The substrate is exposed to a molybdenum precursor and a reactant to form the molybdenum-containing film (e.g., elemental molybdenum, molybdenum oxide, molybdenum carbide, molybdenum silicide, molybdenum nitride). The exposures can be sequential or simultaneous.

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