

Title (en)
AN APPARATUS FOR HIGH-THROUGHPUT PRODUCTION OF COAT MATERIAL ARRAYS, AND ANALYTICAL METHODS USING SUCH ARRAYS

Title (de)
VORRICHTUNG ZUR HOCHDURCHSATZ-PRODUKTION VON BESCHICHTUNGSMATERIAL-ARRAYS UND ANALYTISCHE VERFAHREN ZUR VERWENDUNG SOLCHER ARRAYS

Title (fr)
APPAREIL DESTINE A LA PRODUCTION A HAUT RENDEMENT DE RESEAUX DE MATERIAUX DE REVETEMENT, ET PROCEDES ANALYTIQUES UTILISANT CES RESEAUX

Publication
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Application
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Priority
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Abstract (en)
[origin: WO0132320A1] A method of developing a new coating with desired performance characteristics (12), includes: (a) providing (13) an array of coating wells (14), each well configured for receiving a coating material having a known parameter; (b) placing (16) via an automated device (17) a coating material having the known parameter in each well (18), varying the parameter values in a plurality of wells; (c) correlating the value of the parameter for the coatings deposited in each of the wells with the position of the well in the array; (d) applying (19) a coating leveling force to the array to level the material in the wells via centrifuge (20), and optionally drying; (e) testing the coatings in the array to analyze (21) by detectors (5) the relationship between the position in the array and performance with regard to the property whereby the value of the parameter can be correlated (22) to the property performance, and the results entered in database (23), for selection for production (24). This screening method results in a substantial increase in the discovery rate of new coating materials.

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Citation (search report)
• [Y] US 3198657 A 19650803 - KIMBALL PHILIP D, et al
• [X] JACKMAN R J ET AL: "Using Elastomeric Membranes as Dry Resists and for Dry Lift-OFF", LANGMUIR, AMERICAN CHEMICAL SOCIETY, NEW YORK, NY, US, vol. 15, 13 April 1999 (1999-04-13), pages 2973 - 2984, XP002179004, ISSN: 0743-7463
• [Y] MCFARLAND E W ET AL: "Combinatorial approaches to materials discovery", TRENDS IN BIOTECHNOLOGY, ELSEVIER, AMSTERDAM, NL, vol. 17, no. 3, March 1999 (1999-03-01), pages 107 - 115, XP004157730, ISSN: 0167-7799
• See references of WO 0133211A1

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