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C12N 9/12 (2006.01) C12M 1/40 (2006.01) C12N 11/00 (2006.01) C12N 15/10 (2006.01) C12N 15/113 (2010.01) C12P 19/34 (2006.01) C40B 40/06 (2006.01)

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CAVAC, E. et al., "High-salt transcription of DNA cotethered with T7 RNA polymerase to beads...' Journal of Biological Chemistry, (20210722), vol. 297, no. 3, doi:10.1016/j jbc.2021.100999, page 100999, [XP] 1-23 \* Fig. 1; "Generality of the System" section; Experimental Procedures section \* Hussey Brendan J, Mcmillen David R, "Programmable T7-based synthetic transcription,,,", Nucleic Acids Research, Oxford University Press, GB, GB (20181012), vol. 46, no. 18, doi:10.1093/nar/gky785, ISSN 0305-1048, pages 9842 - 9854, [Y] 1-23 \* Introduction, particularly right column of pg. 9843 \*

(58) Field of Search:

INT CL C12M, C12N, C12P, C40B Other: Questel Orbit, CaPlus, SCOPUS, STM Source, PubMed

- (54) Title of the Invention: Compositions and methods for RNA synthesis Abstract Title: Compositions and methods for RNA synthesis
- (57) Provided herein are compositions, methods, devices, and systems for highly accurate and pure RNA synthesis. Also provided herein are nucleic acid libraries comprising RNAs generated by using devices, compositions and methods disclosed herein.

