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(54) Title: METHODS AND SYSTEMS FOR DETECTION AND ISOLATION OF A NUCLEOTIDE SEQUENCE

(57) Abstract: A method for isolating nucleic acid molecules having a repeating nucleotide sequence or a homopolymeric nucleotide sequence, e.g. a poly A stretch, is described. In particular, the method uses oligomeric capture probes spiked with various amounts of locked nucleic acid (LNA). The invention further describes methods for the isolation of RNA molecules, for example polyadenylated mRNA molecules, which overcome the problems of rapid RNA degradation during isolation and analysis of such nucleic acid molecules. This is of major clinical and diagnostic importance, especially when dealing with RNA viruses, such as retroviruses or when analyzing rare or low-abundant mRNAs or mRNAs from biopsies or tissues enriched with RNases.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CAB Data, Sequence Search, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99/14226 A (WENGEL JESPER ; EXIQON A S (DK); NIELSEN POUL (DK)) 25 March 1999 (1999-03-25)	1-3, 5-18, 27-29, 37-43
Y	claims 115-140; examples 160,161; tables 1-4	4,19-26, 30-35, 44-83, 85-130
Y	----- WO 00/56920 A (SKOUV JAN ; EXIQON A S (DK)) 28 September 2000 (2000-09-28) cited in the application claims 1-49; tables 1-7 ----- -/--	4,19-26, 30-35, 44-83, 85-130

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Information on patent family members

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