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(71) Applicant *(for all designated States except US)*: CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS [ES/ES]; Serrano, 117, E-28006 Madrid (ES).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: ENJUANES SANCHEZ, Luis [ES/ES]; Camino Nuevo, 113, La Moraleja, E-28109 Madrid (ES).

(74) Agents: VON MENGES, Albrecht et al.; Uexküll & Stolberg, Beselerstrasse 4, 22607 Hamburg (DE).

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(54) Title: ARTIFICIAL CHROMOSOME CONSTRUCTS CONTAINING NUCLEIC ACID SEQUENCES CAPABLE OF DIRECTING THE FORMATION OF A RECOMBINANT RNA-VIRUS

(57) Abstract: The present invention relates to methods of preparing a DNA comprising steps, wherein (a) a DNA comprising a full length copy of the genomic RNA (gRNA) or an RNA virus; or (b) a DNA comprising one or several fragments of a gRNA of an RNA virus, which fragments code for an RNA dependent RNA polymerase and at least one structural or non-structural protein; or (c) a DNA having a homology of at least 60% to the sequences of (a) or (b); is cloned into a bacterial artificial chromosome (BAC). Additionally, DNAs are provided, which comprise sequences derived from the genomic RNA (gRNA) of a coronavirus which sequences have a homology of at least 60% to the natural sequence of the virus and code for an RNA dependent RNA polymerase and at least one structural or no-structural protein, wherein a fragment of said DNA is capable of being transcribed into RNA which RNA can be assembled to a virion. Further, the use of these nucleic acids for preparation of viral RNA or virions as well as pharmaceutical preparations comprising these DNAs, viral RNAs or virions is disclosed.