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- *as to the identity of the inventor (Rule 4.17(i))*
- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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(54) Title: NON-HUMAN ANIMALS THAT MAKE SINGLE DOMAIN BINDING PROTEINS

(57) Abstract: Genetically modified non-human animals and methods and compositions for making and using them are provided, wherein the genetic modification comprises (a) a deletion in an immunoglobulin constant region C_H1 gene (optionally a deletion in a hinge region) of a heavy chain constant region gene sequence, and (b) replacement of one or all endogenous V_H, D_H and J_H gene segments with at least one unrearranged light chain variable (V_L) gene segment and at least one unrearranged light chain joining (J_L) gene segment capable of recombining to form a rearranged light chain variable region (V_L/J_L) nucleotide sequence operably linked to the heavy chain constant region gene sequence comprising a deletion in the C_H1 gene and/or insertion of a genetically engineered single rearranged light chain, wherein the mouse is capable of expressing a functional IgM, single domain antigen binding proteins, e.g., V_L single domain binding proteins, and a genetically engineered rearranged light chain.

