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(71) Applicant (for all designated States except US): **R. CREA & CO.** [US/US]; 700 Occidental Avenue, San Mateo, CA 94402 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CREA, Roberto** [IT/US]; 700 Occidental Avenue, San Mateo, CA 94402 (US).

(74) Agents: **REMILLARD, Jane, E.** et al.; Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109 (US).

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(54) Title: LOOK-THROUGH MUTAGENESIS

(57) Abstract: A method of mutagenesis by which a predetermined amino acid is introduced into each and every position of a selected set of positions in a preselected region (or several different regions) of a polypeptide to produce a library of polypeptide analogs. The method is based on the premise that certain amino acids play crucial role in the structure and function of proteins. Libraries can be generated which contain only desired polypeptide analogs and are of reasonable size for screening. The libraries can be used to study the role of specific amino acids in polypeptide structure and function and to develop new or improved polypeptides such as antibodies, antibody fragments, single chain antibodies, enzymes, and ligands.



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