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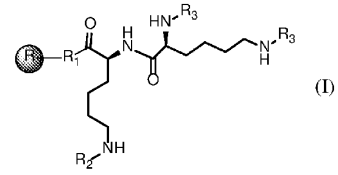
(71) Applicant: **NANJING UNIVERSITY** [CN/CN]; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN).

(72) Inventors: **YAO, Zhujun**; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN). **WEI, Siyuan**; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN). **LIU, Fa**; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN). **ZHANG, Xuchun**; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN). **XI, Jie**; No. 163 Xianlin Avenue, Qixia District, Nanjing, Jiangsu 210023 (CN).

(74) Agent: **NANJING ZHONGLIAN PATENT AGENCY CO., LTD.**; 7 Floor, Wanda Business Building, No.129 Fuyuan Street, Jianye District, Nanjing, Jiangsu 210017 (CN).

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(54) Title: A TYPE OF RMBL RESIN AND ITS PREPARATION METHOD AND APPLICATION IN SOLID-PHASE PEPTIDE SYNTHESIS



(I)

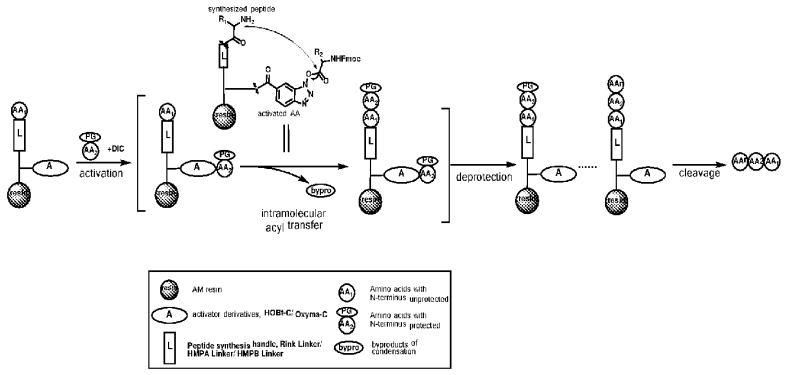


Figure. 2

(57) Abstract: Relates to the field of solid-phase peptide synthesis technology, featuring the preparation and application of the specially designed RMBL resins. Structure of the RMBL resins is presented as Formaula (I). RMBL resin, a series of recyclable intramolecular acyl transfer linker loaded resin, can improve condensation efficiency of amino acids through an intramolecular acyl transfer mechanism, thus allowing efficient syntheses of common peptides, sterically hindered peptides, natural products of sterically hindered amino acid(s)-containing cyclic peptides, and their derivatives. The RMBL strategy developed facilitates efficient peptide synthesis under mild conditions, without additional activating reagents engaged, which meets the requirements of green chemistry. The RMBL strategy is the first-ever developed solid-phase peptide synthesis strategy taking advantage of the intramolecular acyl transfer mechanism, which enables optimized synthesis of sterically hindered peptides in a new reaction manner.

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