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**(12) United States Patent**  
**Vilhelmsen et al.****(10) Patent No.: US 11,759,502 B2****(45) Date of Patent: \*Sep. 19, 2023****(54) COMPOSITIONS OF GLP-1 PEPTIDES AND PREPARATION THEREOF****(71) Applicant: Novo Nordisk A/S, Bagsvaerd (DK)****(72) Inventors: Thomas Vilhelmsen, Strand (DK); Helle Eliassen, Koege (DK); Tue Hansen, Copenhagen (DK)****(73) Assignee: Novo Nordisk A/S, Bagsvaerd (DK)****(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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CPC ..... **A61K 38/26** (2013.01); **A61K 9/2013** (2013.01); **A61K 9/2077** (2013.01); **A61K 31/20** (2013.01)**(58) Field of Classification Search**  
None

See application file for complete search history.

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*Primary Examiner* — Thomas S Heard**(74) Attorney, Agent, or Firm** — Leon Y. Lum**(57) ABSTRACT**

The invention relates to pharmaceutical compositions comprising a first type of granules and a second type of granules, wherein said first type of granules comprises a salt of N-(8-(2-hydroxybenzoyl)amino)caprylic acid and no GLP-1 peptide, and wherein said second type of granules comprises a GLP-1 peptide and no salt of N-(8-(2-hydroxybenzoyl)amino)caprylic acid, as well as the intermediate granules, processes for the preparation of the granules and compositions, and use thereof in medicine.

**28 Claims, No Drawings****Specification includes a Sequence Listing.**