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(54) **BIOEFFECTIVE KRILL OIL COMPOSITIONS**

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9/4825; A61K 31/215; A61K 31/23;
A61K 31/235; A61K 31/575; A61K 9/48;
C11B 3/006; A23L 33/115

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See application file for complete search history.

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(57) **ABSTRACT**

This disclosure discloses new krill oil compositions characterized by having high amounts of phospholipids, astaxanthin esters and/or omega-3 contents. The krill oils are obtained from krill meal using supercritical fluid extraction in a two stage process. Stage 1 removes the neutral lipid by extracting with neat supercritical CO₂ or CO₂ plus approximately 5% of a co-solvent. Stage 2 extracts the actual krill oils by using supercritical CO₂ in combination with approximately 20% ethanol. The krill oil materials obtained are compared with commercially available krill oil and found to be more bioeffective in a number of areas such as anti-inflammation, anti-oxidant effects, improving insulin resistances and improving blood lipid profile.

(58) **Field of Classification Search**
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