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(54) Title: METHOD FOR PREPARING WATER-SOLUBLE ASTAXANTHIN, AND ASTAXANTHIN AQUEOUS SOLUTION PREPARED USING SAID METHOD

(54) 发明名称: 一种制备水溶性虾青素的方法及由其制得的虾青素水溶液

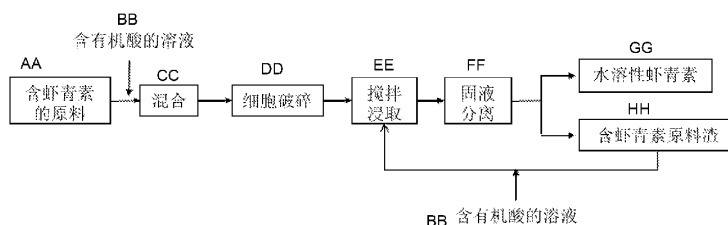


图 1

AA Astaxanthin-containing raw material  
BB Organic acid-containing solution  
CC Mixing  
DD Cell disruption

EE Stir leaching  
FF Solid-liquid separation  
GG Water-soluble astaxanthin  
HH Astaxanthin-containing raw material remnants

(57) Abstract: Provided by the present application is a method for preparing water-soluble astaxanthin. Said method is able to achieve mutual interaction between natural astaxanthin and a component such as a protein, a nucleic acid, or a polysaccharide naturally present within a raw material by means of mixing an astaxanthin-containing raw material and an organic acid-containing solution, then performing cell disruption, and subsequently performing leaching, thereby directly preparing water-soluble astaxanthin without needing to further perform modification on the astaxanthin. The astaxanthin is naturally sourced, the operation procedure is simple, there is a low requirement on equipment, production costs are low, the method is eco-friendly and safe, does not produce organic solvent residue, and is readily industrially implemented.

(57) 摘要: 本申请提供一种制备水溶性虾青素的方法, 所述方法通过将含虾青素的原料与含有机酸的溶液混合后进行细胞破碎, 再进行浸取, 能够实现天然虾青素与原料中天然存在的蛋白质、核酸或多糖等成分间相互作用, 从而直接制得水溶性虾青素, 无需再对虾青素进行改性, 且虾青素来源天然, 操作流程简单, 设备要求低, 生产成本低, 绿色安全, 无有机溶剂残留, 易于工业化实现。

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ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US,  
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