

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局



(10) 国际公布号
WO 2024/169191 A1

(43) 国际公布日
2024 年 8 月 22 日 (22.08.2024)

(51) 国际专利分类号:
E02B 3/18 (2006.01)

(21) 国际申请号: PCT/CN2023/122161

(22) 国际申请日: 2023 年 9 月 27 日 (27.09.2023)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202310127306.2 2023年2月17日 (17.02.2023) CN

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(54) Title: GREEN ISLAND BUILDING PROCESS

(54) 发明名称: 一种绿色筑岛工艺

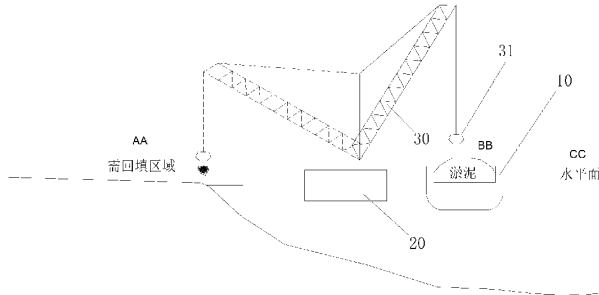


图 1

AA Region requiring backfilling
BB Mud
CC Horizontal plane

(57) Abstract: Disclosed in the present invention is a green island building process, comprising: step 1, digging seabed mud in a dredging region by using a grab or bucket dredger, then transporting the mud to the vicinity of a mooring barge on the edge of a construction region by a mud transporting barge, grab machines being mounted on the mooring barge, and grabbing the mud on the mud transporting barge by means of grabs and unloading the mud to an island building construction region; and step 2, dividing the island building construction region into a plurality of construction sub-regions, the area of each sub-region being 100,000-200,000 m², vacuumizing and draining the construction sub-regions one by one, moreover, a small water retaining causeway being arranged around each sub-region, guiding water pumped out in a vacuum mode into the small causeways to increase loads on the construction sub-regions and synchronously carry out overlying water preloading, and finishing construction

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— 包括国际检索报告(条约第21条(3))。

until the soil body strength of the construction sub-regions reaches a predetermined index. According to the process of the present invention, seabed mud is dug, transported and piled up by using the grabs, and compared with mud obtained by means of cutter suction of a cutter suction dredger, the amount of polluted water is greatly reduced, thereby greatly reducing the amount of sewage generated in subsequent construction steps.

(57) 摘要: 本发明公开了一种绿色筑岛工艺, 包括步骤1: 使用抓斗式或链斗式挖泥船在挖泥区域挖取海底泥土, 然后由运泥驳船运泥至施工区域边缘的围船边, 围船上安装有抓斗机, 通过抓斗抓取运泥船上的泥土并卸泥至筑岛施工区域; 步骤2: 将筑岛施工区域划分为若干个施工小区, 每个小区面积10~20万m², 对各施工小区逐个进行抽真空排水, 同时每个小区的四周设置挡水小围堤, 真空抽出的水导入小围堤内, 对施工小区增加载荷同步实施覆水预压, 直至各施工小区的土体强度达到预定指标, 完成施工。本发明的工艺采用抓斗挖、运、堆海底泥土, 相比绞吸船绞吸获得的泥浆, 被污染的水大幅降低, 从而大大降低后续施工步骤中产生的污水量。