

STRUCTURALLY INTEGRATED MOORING DOLPHINS FOR NEARSHORE DEVELOPMENT

Abstract

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This invention relates to a floating structure with an integrated mooring dolphin structure. The floating structure comprises a hull and at least one integrated mooring dolphin structure. The integrated mooring dolphin structure comprises a channel extending
10 perpendicularly from a bottom surface of the hull, the channel having an inner surface and an outer surface; a mooring pile having a first part configured to be embedded into a seabed and a second part disposed within the channel to be integrated into the floating structure; a fender system with low friction pad, provided around the first part of the mooring pile; and at least one diaphragm ring disposed on the outer surface of the
15 channel; and wherein the mooring pile is restrained from lateral translation within the channel while able to translate in vertical direction in response to tidal changes in the level of body of water.

(Figure 1)