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Aaron

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(54) **MODULAR INTERLOCKING RETAINING WALL/SEAWALL HAVING REDUCED INSTALLATION TIME**

5,533,839 A *	7/1996	Shimada	405/284
5,538,363 A *	7/1996	Eastwood	405/262
5,697,736 A *	12/1997	Veazey et al.	405/284
6,431,797 B2 *	8/2002	Greenberg	405/284
2004/0052588 A1 *	3/2004	Keshmiri	405/284

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* cited by examiner

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(57) **ABSTRACT**

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A seawall is formed of concrete modules that are laterally disposed relative to one another and interlocked to one another at their abutting end walls. Each module has a base that overlies a support surface and an upstanding sea-retaining wall disposed perpendicular to the base, forming an inverted "T" and having no brace walls. The sea-retaining wall has a front surface facing a body of water and a back surface facing land. The seawall is formed by a mold that includes a base having a generally parallelepiped configuration and a pair of slightly inclined mold walls for forming the sea-retaining wall of the module. A first embodiment includes a steel mold. A second embodiment includes an aluminum mold having parts that open along hinge lines and which require reinforcement dowels to prevent pressure-induced bulges.

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E02D 29/00 (2006.01)

(52) **U.S. Cl.** **405/284; 405/286**

(58) **Field of Classification Search** 405/18–21, 405/284, 285, 286, 287, 28, 107, 218
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,747,353 A *	7/1973	Monahan	405/284
4,324,508 A *	4/1982	Hilfiker et al.	405/284
4,804,299 A *	2/1989	Forté et al.	405/285
4,992,005 A *	2/1991	Hilfiker	405/284
5,368,416 A *	11/1994	Cataldo	405/285
5,492,438 A *	2/1996	Hilfiker	405/285

5 Claims, 15 Drawing Sheets

