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**Williamson**

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(54) **METHOD AND APPARATUS FOR PROVIDING FLUID TRANSFER BETWEEN A MARINE PLATFORM AND A SERVICE VESSEL**

*Primary Examiner*—Steven O. Douglas  
(74) *Attorney, Agent, or Firm*—Garvey, Smith, Nehrass & Doody, LLC; Charles C. Garvey, Jr.; Brett A. North

(57) **ABSTRACT**

(76) **Inventor:** **John P. Williamson**, 3025 Roderick St., Morgan City, LA (US) 70380

A method and apparatus is provided for fluid transfer between a fixed marine production platform and a work vessel (eg. jack up barge). The method includes positioning the work vessel next to the production platform and then adjusting the elevational position of the vessel relative to the production platform so that the deck of the production platform and the deck of the work vessel or at about the same elevational position. A bridge truss spans between the deck portions of the production platform and work vessel, the truss having interconnected truss members and a planar surface that enables flexible hoses to be supported by the truss. The truss further includes a plurality of piping spool pieces that span across the truss. Ends of the spool pieces have quick connect fittings that enable the spool pieces to be quickly connected to the piping system of the production platform and work vessel. The gap between the production platform and the work vessel are spanned with the truss. Piping systems on the production platform and work vessel are connected to the spool pieces at the quick connect fittings so that fluid transfer is enabled between the production platform and the work vessel via the spool pieces on the truss. An upper tray enables flexible hoses (eg. hydraulic hoses) to span between the work vessel and production platform.

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(58) **Field of Search** ..... 141/387, 388, 141/389; 441/3-6; 114/230.1, 230.15, 230.16, 230.17, 230.18, 230.19; 414/137.9, 138.1, 138.5, 138.7, 138.8

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,519,034 A	*	7/1970	Manning	.....	141/387
4,396,046 A	*	8/1983	Kentosh	.....	141/387
4,494,475 A	*	1/1985	Eriksen	.....	114/230.14
4,669,412 A	*	6/1987	Pollack	.....	114/230.14

\* cited by examiner

**28 Claims, 6 Drawing Sheets**

