FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

& The Patent Rules, 2003

COMPLETE SPECIFICATION

1. TITLE OF THE INVENTION:

METHOD AND APPARATUS FOR FRICTION STIR WELDING TUBE ENDS FOR A HEAT EXCHANGER

2. APPLICANT:

Name: LOCKHEED MARTIN CORPORATION

Nationality: USA

Address: 6801 Rockledge Drive, Bethesda, Maryland 20817, USA.

3. PREAMBLE TO THE DESCRIPTION:

The following specification particularly describes the invention and the manner in which it is to be performed:

14. The method for forming a joint between a first tube and a first tubesheet, and a second tube and a second tubesheet of claim 13 wherein attaching the second end of the tube to the backing baffle includes attaching a second anvil assembly to the second end of the tube and to the backing baffle.

15. The method for forming a joint between a first tube and a first tubesheet, and a second tube and a second tubesheet of claim 10, the second end of the tube removed so that the second end can be formed that is substantially flush to the second tubesheet.

16. The method for forming a joint between a first tube and a first tubesheet, and a second tube and a second tubesheet of claim 15 further comprising welding the second end of the tube to the second tubesheet.

17. The method for forming a joint between a first tube and a first tubesheet, and a second tube and a second tubesheet of claim 16 wherein welding the second end of the tube to the second tubesheet.

Dated this 24th day of January, 2014.

(CHETAN CHADHA)

PATENT AGENT