



US 20230231333A1

(19) **United States**(12) **Patent Application Publication****Keith et al.**(10) **Pub. No.: US 2023/0231333 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **CONNECTOR ARRANGEMENT****Publication Classification**(71) Applicant: **Siemens Energy Global GmbH & Co. KG**, Munich (DE)(72) Inventors: **Philip Keith**, Grange-Over-Sands (GB);
Scott Spencer, Barrow-in-Furness (GB); **Daniel Church**, Soutergate (GB)(73) Assignee: **Siemens Energy Global GmbH & Co. KG**, Munich (DE)(21) Appl. No.: **17/980,651**(22) Filed: **Nov. 4, 2022**(30) **Foreign Application Priority Data**

Jan. 14, 2022 (GB) 2200452.7

(51) **Int. Cl.****H01R 13/02** (2006.01)**H01R 4/58** (2006.01)**H01R 13/50** (2006.01)(52) **U.S. Cl.**CPC **H01R 13/025** (2013.01); **H01R 4/58**
(2013.01); **H01R 13/50** (2013.01); **H01R**
2101/00 (2013.01)

(57)

ABSTRACT

A connector assembly for an electrical connection, the connector assembly includes a plug and a socket. The plug includes a connector and a frame. The connector has a solid core conductor, the solid core conductor has an end portion. The frame surrounds the solid core conductor except for the end portion. The end portion is deformed to overlap the frame. The socket includes a socket conductor and a receiving portion into which the plug engages. The end portion directly contacts the socket conductor to form an electrical contact and causes the frame to deflect and provide a bias to force the end portion and the socket conductor into direct contact with one another.

