



US 20230231942A1

(19) **United States**(12) **Patent Application Publication**  
**WANG**(10) **Pub. No.: US 2023/0231942 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **DISPLAY DEVICE****Publication Classification**(71) Applicant: **Wuhan China Star Optoelectronics Semiconductor Display Technology Co., Ltd.**, Wuhan, Hubei (CN)(51) **Int. Cl.**  
**H04M 1/02** (2006.01)(72) Inventor: **Wenqiang WANG**, Wuhan, Hubei (CN)(52) **U.S. Cl.**  
CPC ..... **H04M 1/0268** (2013.01); **H04M 1/0216** (2013.01)(73) Assignee: **Wuhan China Star Optoelectronics Semiconductor Display Technology Co., Ltd.**, Wuhan, Hubei (CN)(57) **ABSTRACT**(21) Appl. No.: **17/615,158**

A display device is provided, which includes a first folding frame, a second folding frame, a first support plate, a second support plate, a pretension assembly, and a flexible display screen. The second folding frame rotates relative to the first folding frame. The first support plate is disposed on the first folding frame and the second folding frame and includes a bending structure. The bending structure is connected to the first folding frame and the second folding frame. The second support plate is disposed on at least one side of the first support plate. The pretension assembly is connected to the second support plate. The flexible display screen is disposed on the first support plate and the at least one second support plate and is connected to the second support plate. The pretension assembly is configured to provide a pretension force to the flexible display screen.

(22) PCT Filed: **Nov. 15, 2021**(86) PCT No.: **PCT/CN2021/130717**

§ 371 (c)(1),

(2) Date: **Nov. 30, 2021**(30) **Foreign Application Priority Data**

Sep. 7, 2021 (CN) ..... 202111044269.6

