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**Park et al.**

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(54) **FLEXIBLE DISPLAY DEVICE**

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(71) Applicant: **SAMSUNG DISPLAY CO., LTD.**,  
Yongin, Gyeonggi-Do (KR)

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(72) Inventors: **Sang-II Park**, Yongin-si (KR); **Jeoung Sub Lee**, Seoul (KR); **Min-Hoon Choi**, Seoul (KR); **In Sun Hwang**, Suwon-si (KR)

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(73) Assignee: **Samsung Display Co., Ltd.**, Yongin-si (KR)

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 184 days.

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*Primary Examiner* — Timothy L Rude

(74) *Attorney, Agent, or Firm* — Lewis Roca Rothgerber Christie LLP

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(57) **ABSTRACT**

(51) **Int. Cl.**  
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A flexible display device includes a flexible display panel, a touch sensing layer on the flexible display panel, and a window on the touch sensing layer. The window may include an elastic portion and a plurality of rigid portions at a surface of the elastic portion and separated from each other. The elastic portion may be made of a soft material having elastic characteristics, and the rigid portion may be made of a hard material. The rigid portion may have a checkered pattern or a striped pattern at the surface of the elastic portion. The flexible display device may also include a barrier film at a surface of the flexible display panel. The barrier film may protect the flexible display panel and the touch sensing layer from external impacts.

(52) **U.S. Cl.**  
CPC ..... **G06F 1/1652** (2013.01); **G02F 1/13338** (2013.01); **G06F 1/1643** (2013.01); **G06F 2203/04102** (2013.01)

(58) **Field of Classification Search**  
CPC ..... G02F 1/13338  
See application file for complete search history.

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**12 Claims, 6 Drawing Sheets**

