

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SAMSUNG ELECTRONICS CO., LTD.,  
SAMSUNG ELECTRONICS AMERICA, INC., and APPLE INC.,  
Petitioner

v.

SMART MOBILE TECHNOLOGIES LLC,  
Patent Owner.

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IPR2022-01248  
Patent 8,842,653 B1

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Before HYUN J. JUNG, GARTH D. BAER, and  
AARON W. MOORE, *Administrative Patent Judges*.

MOORE, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314

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## I. INTRODUCTION

### A. *Background and Summary*

Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Apple Inc. (collectively, “Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting institution of an *inter partes* review of claims 1–21 and 23–30 of U.S. Patent No. 8,842,653 B1 (Ex. 1001, “the ’653 patent”). Smart Mobile Technologies LLC (“Patent Owner”) filed a Preliminary Response (Paper 8, “Prelim. Resp.”). With our authorization, the parties filed additional briefs directed solely to the issue of inconsistent claim constructions between this proceeding and related litigation. Papers 9, 10.

Under 35 U.S.C. § 314, an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the Petition in view of the present record and for the reasons explained below, we determine that Petitioner has shown a reasonable likelihood of prevailing with respect to at least one of the challenged claims.

We accordingly institute an *inter partes* review of claims 1–21 and 23–30 of the ’653 patent on all presented challenges. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

### B. *Related Matters*

The parties identify *Smart Mobile Techs. LLC v. Apple Inc.*, 6:21-cv-00603 (W.D. Tex.) and *Smart Mobile Techs. LLC v. Samsung Elecs. Co., Ltd.*, 6:21-cv-00701 (W.D. Tex.) as related matters. Pet. 85–86; Paper 4, 1.

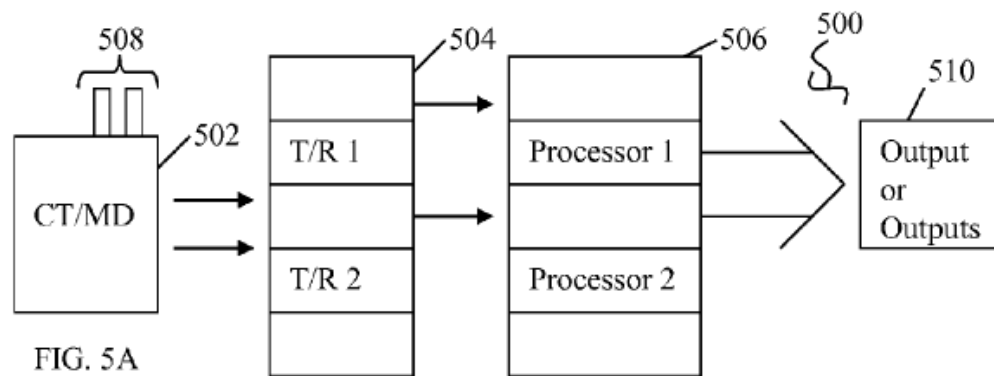
We have instituted *inter partes* reviews of related patents. *See Samsung Elecs. Co., Ltd. v. Smart Mobile Techs. LLC*, IPR2022-00766, Paper 14 (PTAB Oct. 26, 2022); *Samsung Elecs. Co., Ltd. v. Smart Mobile*

*Techs. LLC*, IPR2022-01004, Paper 13 (PTAB Dec. 5, 2022); *Samsung Elecs. Co., Ltd. v. Smart Mobile Techs. LLC*, IPR2022-01005, Paper 10 (PTAB Dec. 5, 2022).

IPR2022-01222, IPR2022-01223, and IPR2022-01249 are also pending and involve related patents.

C. *The '653 Patent*

The '653 patent describes an unfulfilled need for multiple transmitters and receivers (“T/R”) in a cellular telephone or mobile wireless device (“CT/MD”). *See* Ex. 1001, 1:48–51. Figure 5A of the patent is reproduced below.



*Figure 5A shows a “a dual antenna, dual T/R unit in a CT/MD interfacing with a dual processor.” Ex. 1001, 2:15–17.*

Dual antenna 508 and dual T/R unit 504 interface with dual processor 506 in dual band system 500. *See id.* at 4:37–39. System 500 can communicate through outputs 510, which can be “fibre optic channel, ethernet, cable, telephone, or other.” *Id.* at 4:42–45.

“The multiple processors 506 allow for parallel and custom processing of each signal or data stream to achieve higher speed and better quality of output.” Ex. 1001, 4:51–53. Processors 506 include “DSP, CPU,

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