

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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**ZTE (USA), INC.**

**Petitioner,**

**v.**

**FRACTUS S.A.,**

**Patent Owner.**

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**IPR No. IPR2018-01461**

**U.S. Patent No. 9,054,421**

**Issue Date: June 9, 2015**

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**PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 9,054,421 PURSUANT TO  
35 U.S.C. §§ 311-319 & 37 C.F.R. 42**

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**LIST OF EXHIBITS**

<b>Exhibit No.</b>	<b>Document</b>
Ex. 1001	U.S. Patent No. 9,054,421
Ex. 1002	Declaration of Dr. Chris Bartone
Ex. 1003	Misra et al., “Study of Impedance and Radiation Properties of a Concentric Microstrip Triangular-Ring Antenna and Its Modeling Techniques Using FDTD Method,” IEEE Transactions on Antennas and Propagations, Vol, 46, No. 4, April, 1998 (“ <i>Misra I</i> ”)
Ex. 1004	Misra et al., “Experimental Investigations on the Impedance and Radiation Properties of a Three-Element Concentric Microstrip Antenna,” Microwave and Optical Technology Letters, Vol, 11, No. 2, February, 1996 (“ <i>Misra II</i> ”)
Ex. 1005	U.S Patent No. 6,133,879 (“ <i>Grangeat</i> ”)
Ex. 1006	U.S Patent No. 6,195,048 (“ <i>Chiba</i> ”)
Ex. 1007	Declaration of Brian Durrance
Ex. 1008	Fractus v. ZTE et al., Case No. 2:17-cv-00561 (D.I. 71)
Ex. 1009	Fractus v. Samsung et al., Case No. 6:09-cv-00203 (D.I. 526)
Ex. 1010	Non-Final Office Action, U.S. Patent 9,054,421
Ex. 1011	Terminal Disclaimer, U.S. Patent 9,054,421
Ex. 1012	Ex. N from Patent Owner’s Claim Construction Brief, Fractus v. ZTE et al., Case No. 2:17-cv-00561
Ex. 1013	Claim 17 of App. No. PCT/ES99/00296, filed Sep. 20, 1999
Ex. 1014	July 18, 2018 Certified Letter from Library of Congress regarding <i>Misra I</i>
Ex. 1015	July 18, 2018 Certified Letter from Library of Congress regarding <i>Misra II</i>
Ex. 1016	<i>inter partes</i> Reexamination Action Closing Prosecution 95/001,483
Ex. 1017	Declaration of Gang Chen

## I. INTRODUCTION

ZTE (USA), Inc. (“Petitioner”) requests *inter partes* review (“IPR”) of claims 1-2, 4-12, and 21-22 (“the challenged claims”) of U.S. Patent No. 9,054,421 (“the ’421 patent”) (Ex. 1001), which on its face is assigned to Fractus, S.A. (“Patent Owner”).

The claims in the ’421 patent are very similar to claims in related patents (identified below) that were rejected and never allowed in *inter partes* reexaminations, where an opposing party could respond to the Patent Owner’s arguments in favor of patentability. As shown herein, all the challenged claims are invalid under grounds not previously considered by the PTO. Claims 1-2, 4-12, and 21-22 should be found unpatentable and canceled on these grounds.

## II. MANDATORY NOTICES UNDER 37 C.F.R. § 42.8

### A. Real Party-in-Interest

Petitioner identifies ZTE Corporation, ZTE (USA), Inc. and ZTE (TX), Inc. as the real parties-in-interest.

### B. Related Matters

Petitioner is contemporaneously filing additional *inter partes* review (“IPR”) petitions on 6 patents that are based on the same specification as the ’421 patent, namely U.S. Patent Nos. 7,397,431 (IPR2018-01451); 7,394,432 (IPR2018-01455);

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8,941,541 (IPR2018-01456); 8,976,069 (IPR2018-01457); 9,240,632 (IPR2018-01462); and 9,362,617 (IPR2018-01463).

Patent Owner has alleged that Petitioner infringes these patents in *Fractus, S.A. v. ZTE Corporation, ZTE (USA), Inc., and ZTE (TX), Inc.*, Civil Action No. 2:17-cv-00561-JRG, which is pending in the U.S. District Court for the Eastern District of Texas. Petitioner is not aware of other pending judicial or administrative matters that would affect, or be affected by, a decision in this proceeding.

The '421 patent has not been subject to any other litigation or PTO proceedings after its issuance, but it shares the same specification as several other patents that have been involved in the following proceedings.

Two of the seven patents above (U.S. Patent Nos. 7,397,431 and 7,394,432) and several other patents claiming priority to the same specification, were the subject of the patent infringement lawsuit *Fractus, S.A. v. Samsung et al.*, Civil Action No. 6:09-cv-00203-LED-JDL, filed in the U.S. District Court for the Eastern District of Texas in May of 2009. That litigation concluded in 2014, when the parties settled while the case was pending before the Federal Circuit.

The '421 patent was also related to the following PTO proceedings on patents issued from the same specification.

<b>Proceeding</b>	<b>Case Number</b>	<b>Filed</b>	<b>Status</b>
<i>Inter partes</i> reexamination	95/001,483	Nov. 11, 2010	Terminated

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