

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of: Sunil K. Rao, et al.  
U.S. Patent No.: 9,614,943 Attorney Docket No.: 39843-0128IP1  
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Title: SYSTEM TO INTERFACE INTERNET PROTOCOL (IP) BASED  
WIRELESS DEVICES WITH SUBTASKS AND CHANNELS

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**PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT  
NO. 9,614,943 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42**

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**EXHIBITS**

- EX-1001 U.S. Patent No. 9,614,943 to Sunil K Rao, et al. (“the ’943 patent”)
- EX-1002 Excerpts from the Prosecution History of the ’943 Patent (“the Prosecution History”)
- EX-1003 Declaration of Dr. Michael Allen Jensen
- EX-1004 [RESERVED]
- EX-1005 U.S. Patent No. 6,144,711 to Gregory G. Raleigh, et al. (“Raleigh”)
- EX-1006 U.S. Patent No. 5,784,032 to Ronald H. Johnston, et al. (“Johnston”)
- EX-1007 International Publication No. WO 98/27748 (“WO748”)
- EX-1008 European Patent Application 0 660 626 A2 to John Daniel Byrne (“Byrne”)
- EX-1009 U.S. Patent No. 5,594,737 to Klaus-Dieter Pillekamp (“Pillekamp”)
- EX-1010 U.S. Patent No. 5,590,133 to Lars Billström, et al. (“Billström”)
- EX-1011 P.W. Wolniansky, et al., V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel, published in 1998 URSI International Symposium on Signals, Systems, and Electronics. Conference Proceedings (Cat. No.98EX167) (October 1998) (“Wolniansky”)
- EX-1012 U.S. Patent No. 6,005,876 to Leonard Joseph Cimini, Jr., et al. (“Cimini”)

- EX-1013 [RESERVED]
- EX-1014 ETSI EN 301 344 V6.7.1, Digital cellular telecommunications system (Phase 2+); General Packet Radio Service (GPRS); Service description; Stage 2 (GSM 03.60 version 6.7.1 Release 1997)
- EX-1015 U.S. Patent No. 5,425,050 to William F. Schreiber, et al.
- EX-1016 U.S. Patent No. 5,726,978 to Carl Magnus Frodigh, et al.
- EX-1017 [RESERVED]
- EX-1018 J. J. Spicer, et al., Wireless office data communications using CT2 and DECT, IEE Colloquium on Personal Communications: Circuits, Systems and Technology, 1993, pp. 9/1-9/4.
- EX-1019 U.S. Patent No. 6,243,581 to Jastinder Jawanda
- EX-1020 Excerpts from Alan V. Oppenheim, et al., Signals and Systems, Prentice Hall, New Jersey, 1983
- EX-1021 Excerpts from Theodore S. Rappaport, Wireless Communications Principles & Practice, Prentice Hall, 1996
- EX-1022 R. G. Vaughan, et al., Antenna diversity in mobile communications, in IEEE Transactions on Vehicular Technology, vol. 36, no. 4, pp. 149-172, Nov. 1987
- EX-1023 S. M. Alamouti, A simple transmit diversity technique for wireless communications, in IEEE Journal on Selected Areas in Communications, vol. 16, no. 8, pp. 1451-1458, Oct. 1998
- EX-1024 A. A. Abidi, Direct-conversion radio transceivers for digital communications, in IEEE Journal of Solid-State Circuits, vol. 30, no. 12, pp. 1399-1410, Dec. 1995

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