Roberto Vincenti Gatti – Professional Curriculum Vitae – December 2025

Summary

Roberto Vincenti Gatti received the Laurea degree summa cum laude from the University of Perugia, Italy, in 2000, and the Ph.D. degree from the same University in 2007. He joined the University of Perugia as Assistant Professor in 2007 and, since 2025, has been Associate Professor. He currently teaches the courses of Antennas and Microwave Systems for Aerospace.

Along the years he headed several industrial and research projects attaining a profound know-how and experience in the area of phased array antennas and RF passive microwave systems.

His current research activities include the analysis, modelling and design of phased arrays and reflectarrays, phase-only and phase/amplitude synthesis and optimization techniques for planar and conformal arrays, design of passive microwave and millimeter-wave components, investigation of innovative architectures for reconfigurable devices.

He has produced more than 110 publications and presentations in international conferences, he is holder of two international patents and has developed a rigorous and efficient CAD tool for the analysis and design of large electronically scanning slotted waveguide antennas (www.swan-soft.com).

He is serving as a reviewer of numerous technical journals such as IEEE Transactions on Microwave Theory and Techniques, IEEE Transactions on Antennas and Propagation, IET Electronics Letters, International Journal of Microwave and Wireless Technologies, IEEE Transactions on Vehicular Technology and International Journal on RF and Microwave Computer-Aided Engineering.

Since 2009 he is a member of the IEEE International Microwave Symposium (IMS) Technical Program Review Committee (TPRC), currently serving in “Airborne and Space Systems” sub-committee.

In Nov 2017 he has been appointed as Chair of the IEEE IMS TPRC "Phased Arrays, MIMO and Beamformers" sub-committee.

In Oct 2022 he has been appointed as Chair of the IEEE IMS TPRC "Airborne and Space Systems" sub-committee.

His main expertise are:
• Analysis and design of slotted waveguide arrays for radar and communication systems (mono-pulse radars, flared slotted waveguide arrays, beam steering slotted waveguide arrays, etc.)
• Phased arrays (WG aperture, patch, Vivaldi, etc.) and BFNs in waveguide (WG, ridge WG, coaxial line, etc.) and printed technology (microstrip, stripline, CPW, square coax., etc.).
• Active arrays: architectures and design techniques.
• Design of electronic beam steering reflectarray antennas.
• Design of microwave components and devices.

Education

University of Perugia
MSc, Electrical Engineering
1994 – 2000
Master Thesis title: "Design of an electronic beam steering antenna for mobile satellite terminals".
Final mark: 110/110 cum laude.

University of Perugia
PhD, Microwave Engineering
2003 – 2007
Thesis title: "Reconfigurable and smart antenna systems for mobile communications".

Experience

Chair of IEEE IMS TPRC "Phased Arrays, MIMO and Beamformers" Sub-committee
IEEE International Microwave Symposium (IMS) – http://www.mtt.org/ims.html
November 2017 – October 2022
Appointed as Chair of the IEEE International Microwave Symposium Technical Program Review Committee "Phased Arrays, MIMO and Beamformers" Sub-committee.

Chair of IEEE IMS TPRC "Airborne and Space Systems" Sub-committee
IEEE International Microwave Symposium (IMS) – http://www.mtt.org/ims.html
October 2022 – Present
Appointed as Chair of the IEEE International Microwave Symposium Technical Program Review Committee "Airborne and Space Systems" Sub-committee.

Technical Program Review Committee (TPRC)
IEEE International Microwave Symposium (IMS) – http://www.mtt.org/ims.html
2009 – Present
Member of the IEEE International Microwave Symposium Technical Program Review Committee since 2009:
• Serving as a member of the "Passive Circuit Elements" Sub-committee in 2009 and 2010.
• Serving as a member of the " RF Arrays as Antennas and Power Combiners" Sub-committee since 2011.
• Appointed as Chair of the "RF Arrays as Antennas and Power Combiners" Sub-committee in Nov 2017.
• Appointed as Chair of the " Airborne and Space Systems" Sub-committee in Oct 2022.

Technical Program Review Committee (TPRC)
IEEE International Phased Array Symposium
2022 – Present
Member of the IEEE International Phased Array Symposium Technical Program Review Committee since 2022.

International Journal of RF and Microwave Computer-Aided Engineering, Wiley Periodicals, Inc.
December 2017 - Present
Member of the editorial board as Editor in Chief for the *International Journal of RF and Microwave Computer-Aided Engineering* since December 2017.

SWAN Software
Slotted Waveguide ANtennas Analysis and Design – http://www.swan-soft.com
September 1999 – Present
He has developed a rigorous and efficient CAD tool for the analysis and design of large electronically scanning slotted waveguide antennas: SWAN (Slotted Waveguide ANtennas Analysis and Design). For more details on the software visit the website www.swan-soft.com.

Associate Professor
University of Perugia
December 2025 - Present
His teaching activities are primarily centered on the course "Antennas", which he has been responsible for over many years, guiding students through both theoretical foundations and practical applications.

Assistant Professor
University of Perugia
November 2007 – December 2025
Research activities concern the analysis, modeling and design of phased arrays and reflectarrays, phase-only and phase/amplitude synthesis and optimization techniques for linear, planar and conformal arrays, design of phase-shifters and passive microwave and millimeter-wave components. Teaching activities are related to the courses of "Antennas" and of "Wireless Systems and Design of RF Circuits". Along the years several dedicated CAD tools have been developed. In particular codes for the design of:
• Large slotted waveguide array antennas based on various technologies and architectures
• Large reflectarray and parabolic reflector antennas with various different optical configurations
• Meander-line polarizers
• Rotman lenses
• Blass and Nolen matrixes
• Beam-Forming Networks in microstrip, stripline, CPW, SIW and waveguide technologies
Main Projects:
• ARASCOM: 'MEMS & Liquid Crystal based' Agile Reflectarray Antennas for Security & Communication (FP7 Project)

• Substrate Integrated Systems for millimeter-wave applications (MIUR, FIRB2009)
• RESKUE: Transportable REflectarray Antenna for Satellite KU-band Emergency Communications (ESA Project)
• Broadband C, X and Ku-band phased array antennas for avionic radar and data-link applications (Elettronica Aster)
• Tracker GPS Project: design of ultra-compact antennas operating at 868 MHz (MB Elettronica)
• Design of a Compact Rotman Lens for Ka-band Satellite Multi-beam Antennas (ESA Contract)
• Miniaturised Ka-band FSS transponder for small satellites (ESA Project)
• ENTERPRISING Project (MIUR, PRIN2017)
• "Realizzazione di attività di Ricerca e Sviluppo di competenze innovative" - nanosatellites (ASI Project)
• Innovative Multirole Antennas for avionic applications (Elettronica Aster)
• Dual-polarization X/Ka band illuminator of a 1.8-m SATCOM parabolic antenna (Fincantieri NexTech)
• Ka-band SATCOM parabolic antenna for avionic applications (Elettronica Aster)

Contract Researcher
University of Perugia
October 2001 – November 2007
Research activities concern the analysis, modeling and design of phased arrays and reflectarrays, phase-only and phase/amplitude synthesis and optimization techniques for linear, planar and conformal arrays, design of phase-shifters and passive microwave and millimeter-wave components, investigation of innovative architectures for MEMS or diode-based reconfigurable devices.
Main Projects:
• Design of a RX/TX planar phased array operating at Ka-Band (Alenia Spazio S.p.A)
• Feasibility study of an X-band active phased array surveillance radar (FIAR S.p.A.)
• Novel technologies and electromagnetic modeling for the design of T/R modules for phased arrays radars (Alenia Marconi Systems)
• Technologies for the implementation of microwave phase shifters for microstrip patch arrays (Marconi Selenia Comunications S.p.A.)
• Preliminary design for second-generation MULTI-BEAM SAR (ASI)
• TRANSPONDERS Feasibility Study (ASI)
• Design of phase shifters, BFNs and control networks for C-band and Ku-band patch arrays (Marconi Selenia Comunications S.p.A.)
• "Satellite Access for European Trains" (SAET European Space Agency Project)

Invited Professor
University of Palermo
October 2003 – October 2003
Lecturer in the Master program "Microwave systems and technologies for telecommunications"

Deputy President
RF Microtech
September 2007 – March 2012

Main Activities:
• Study and development of innovative solutions and architectures for active electronic beam steering flat antennas for Ku and Ka-band mobile satellite terminals.
• Modeling and design of slotted waveguide arrays and waveguide beam forming networks for communication and radar applications.
• Electromagnetic modeling and design of microwave and millimeter-wave components, including substrate integrated waveguides (SIW).
• Modeling and design of electronic reconfigurable reflectarrays for communication, mm-wave imaging and radar applications.
• Design of radiating elements, beam forming networks, arrays and retro-directive arrays in printed circuit technology.

Main Projects:
• VISPO: Vehicular Indoor System for POsitioning (ELETTRIC80)
• SMAR Radar Antenna Performance Evaluation (EADS ASTRIUM)
• Flat RX/TX Antenna for Ku-band mobile satellite terminals (RADIOTECH)
• X-Band Radar Antenna Feasibility Study (INDRA SISTEMAS)
• Lyra50: Low-SLL high-hain 21-feet flared narrow-wall slotted waveguide antenna for X-band radar applications (SELEX-SI)

Patents & Trademarks

- **Flat Scanning Antenna**

United States Patent US2011175780 A1
Issued December 3, 2009
Inventors: Roberto Vincenti Gatti, Luca Marcaccioli, Roberto Sorrentino

The present invention relates to a flat scanning antenna comprising: a radiant unit, having a flat shape and comprising in its turn one or more radiant waveguides arranged side by side as array, said radiant waveguides being in their turn divided in one or more modules, on each of them there is one or more slots arranged on the same plane to receive or transmit radio-frequency signals; and at least one beam forming network , connected to said radiant unit, to feed said modules of said radiant waveguides with proper phases, in order to realize the scanning of a radiant beam in elevation with respect said radiant unit.

- **Radio Frequency Positioning System For Vehicles**

Europe Patent EP2396669 A1
Issued August 5, 2010
Inventors: Roberto Vincenti Gatti, Luca Marcaccioli, Vittorio Cavirani, Francesco Trotta, Franco Manzini, Domenico Di Terlizzi

A positioning system for vehicles operating at radio frequency comprises at least one antenna mounted on each vehicle, one of the reference antennas positioned in known points within an area , in the circuit of the reference antennas there may be integrated elements that identify them; the antenna consists of a transmitting element (7 - TX) and a receiving element (48 - RX), which may be separate or coincident; the reference antennas consist of retro-directive arrays capable of receiving a radio frequency signal and retransmitting it in the same and contrary direction, in azimuth and/or in elevation, relative to that of the signal received.

- **SWAN SLOTTED WAVEGUIDE ANTENNAS**

European Trademark CTM/006338594
Issued October 5, 2007
Proprietors: Roberto Vincenti Gatti

European Union trademark (CTM).

Publications

- **National conferences**

[1n] R. Vincenti Gatti, R. Sorrentino, M. Dionigi, “Analisi veloce ed accurata di schiere di guide d'onda fessurate a scansione elettronica,” XIV RiNEm, Ancona 16-19 Sept. 2002.
[2n] R. Vincenti Gatti, R. Sorrentino, “Antenne piatte a basso costo a scansione elettronica per terminali satellitari mobili in banda Ka,” XV RiNEm, Cagliari 11-15 Sept. 2004.
[3n] L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, “Series expansion method for phase-only shaped beam synthesis and adaptive nulling,” XV RiNEm, Cagliari 11-15 Sept. 2004.
[4n] C. Tomassoni, L. Marcaccioli, M. Dionigi, M. Mongiardo, R. Vincenti Gatti, R. Sorrentino, “Un metodo CAD per il progetto di filtri e diplexer ripiegati basato sul calcolo della GSM della singola discontinuità,” XV RiNEm, Cagliari 11-15 Sept. 2004.
[5n] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “Progetto di antenne riconfigurabili a guida fessurata per terminali mobili satellitari,” ElEm’05, Orvieto 12-16 Apr. 2005.
[6n] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “Strumenti CAD per array di guide d’onda fessurate,” Telemil05, Livorno 15-16 Jun. 2005.
[7n] R. Vincenti Gatti, L. Marcaccioli, A. Ocera, E. Sbarra, M. Alunno Corbucci, R. Sorrentino, “Dispositivi riconfigurabili per antenne intelligenti dual-band,” XVI RiNEm, Genova 18-21 Sept. 2006.
[8n] B. Mencagli, P. Farinelli, L. Marcaccioli, R. Vincenti Gatti, B. Margesin, F. Giacomozzi, R. Sorrentino, “Progetto e realizzazione di un reflectarray riconfigurabile a MEMS per Imaging a onde millimetriche,” XVI RiNEm, Genova 18-21 Sept. 2006.
[9n] M. Mongiardo, M. Patassini, R. Sorrentino, C. Tomassoni, R. Vincenti Gatti, “Analisi di antenne a dipolo ripiegato a 2.45 GHz per applicazioni RFID,” XVI RiNEm, Genova 18-21 Sept. 2006.
[10n] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “Antenne a guida d'onda fessurata per applicazioni civili e militari,” MECSA 2007, Fisciano 14-15 May. 2007.

- **International conferences**

[1c] R. Vincenti Gatti, R. Sorrentino, P. Mezzanotte, L. Roselli and F. Alimenti, “Accurate design of Ka-band flat scanning antennas for mobile satellite terminals,” 31st EuMC, European Microwave Conference, London, England, 23-27 Sept. 2001.
[2c] R. Vincenti Gatti, R. Sorrentino, M. Dionigi, “Equivalent circuit of radiating longitudinal slots in dielectric filled rectangular waveguides obtained with FDTD method,” IEEE MTT-S, International Microwave Symposium, Seattle, Washington, USA, 2-7 June 2002, vol. 2, pp. 871-874.

[3c] R. Vincenti Gatti, R. Sorrentino, “A Ka-band active scanning array for mobile satellite terminals using slotted waveguide technology,“ 25th ESA Antenna Workshop on Satellite Antenna Technology, ESTEC, Noordwijk, The Netherlands, 18-20 Sept. 2002.
[4c] R. Vincenti Gatti, R. Sorrentino, M. Dionigi, “Fast and accurate analysis of scanning slotted waveguide arrays,” 32nd EuMC, European Microwave Conference, Milan, Italy, 23-27 Sept. 2002.
[5c] R. Sorrentino, R. Vincenti Gatti, “A novel wideband microstrip-to-waveguide probe transition,” MSS'2003, Mediterraean Microwave Symposium, Cairo, Egypt, 6-8 May 2003.
[6c] R. Sorrentino, R. Vincenti Gatti, “Design of low-cost flat-profile active scanning antennas for mobile satellite terminals in Ka-band,” Invited paper at MMS’2003, Mediterranean Microwave Symposium, Cairo, Egypt, 6-8 May 2003.
[7c] R. Vincenti Gatti, R. Sorrentino, “Low-cost flat-profile active scanning antenna for mobile satellite terminals in Ka-band,” 3rd ESA Workshop on Millimetre Wave Technology and Applications, Espoo, Finland, 21-23 May 2003.
[8c] R. Vincenti Gatti, R. Sorrentino, M. Dionigi, “Low cost active scanning antenna for mobile satellite terminals,” IEEE AP-S, International Symposium on Antennas and Propagation 2003, Columbus, Ohio, USA, 22-27 June 2003.
[9c] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “A novel phase-only method for shaped beam synthesis and adaptive nulling,” 33rd EuMC, European Microwave Conference, Munich, Germany, 6-10 Oct. 2003.
[10c] R. Vincenti Gatti, M. Dionigi, R. Sorrentino, “A novel MMIC-compatible microstrip-to-waveguide probe transition,” ESA Microwave Technology and Techniques Workshop, ESTEC, Noordwijk, The Netherlands, 11-12 May 2004.
[11c] L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, “Series expansion method for phase-only shaped beam synthesis and adaptive nulling,” URSI 2004, International Symposium on Electromagnetic Theory, Pisa, Italy, 23-27 May 2004.
[12c] R. Vincenti Gatti, R. Sorrentino, “Shaped beam synthesis method for slotted waveguide arrays,” MMS’2004, Mediterranean Microwave Symposium, Marseille, France, 1-3 June 2004.
[13c] C. Tomassoni, L. Marcaccioli, M. Dionigi, M. Mongiardo, R. Vincenti Gatti and R. Sorrentino, “CAD of folded filters and diplexers by the generalized scattering matrix of the single step discontinuity,” IEEE MTT-S, International Microwave Symposium, Fort Worth, Texas, USA, 6-11 June 2004.
[14c] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “Design of slotted waveguide arrays with arbitrary complex slot voltage distribution,” IEEE AP-S, International Symposium on Antennas and Propagation 2004, Monterey, California, USA, 20-26 Jun. 2004.
[15c] R. Sorrentino, R. Vincenti Gatti, “Slotted waveguide active phased arrays for mobile satellite terminals,” Invited paper at ISSSE 2004, International Symposium on Signals, Systems and Electronics, Linz, Austria, 10-13 Aug. 2004.
[16c] L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, “Real-time interference nulling method for mobile communication systems ,” IEEE RAWCON 2004, Radio and Wireless Conference, Atlanta, Georgia, USA, 19-22 Sept. 2004.
[17c] R. Vincenti Gatti, R. Sorrentino, “A fast and accurate CAD tool for slotted waveguide arrays for radar applications,” 1st EuRAD, European Radar Conference, Amsterdam, The Netherlands, 11-15 Oct. 2004.
[18c] R. Vincenti Gatti, R. Sorrentino, “Slotted waveguide antennas with arbitrary radiation pattern,” 34th EuMC, European Microwave Conference, Amsterdam, The Netherlands, 11-15 Oct. 2004.
[19c] D. Trincia, L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, “Modified projection method for array pattern synthesis,” 34th EuMC, European Microwave Conference, Amsterdam, The Netherlands, 11-15 Oct. 2004.
[20c] C. Tomassoni, L. Marcaccioli, M. Dionigi, M. Mongiardo, R. Vincenti Gatti, R. Sorrentino, “A Procedure for Computer-Aided Design of Compact Diplexers with Folded Filters,” 34th EuMC, European Microwave Conference, Amsterdam, The Netherlands, 11-15 Oct. 2004.
[21c] R. Vincenti Gatti, R. Sorrentino, “A fast and accurate CAD tool for slotted waveguide arrays,“ 28th ESA Antenna Workshop on Satellite Antenna Technology, ESTEC, Noordwijk, The Netherlands, 31 May - 3 June 2005.
[22c] R. Vincenti Gatti, R. Sorrentino, V. Schena, G. Losquadro, “Flat-profile active scanning antenna for satellite terminals in Ku-band operating on new fast trains generation,“ 28th ESA Antenna Workshop on Satellite Antenna Technology, ESTEC, Noordwijk, The Netherlands, 31 May - 3 June 2005.
[23c] R. Sorrentino, R. Vincenti Gatti, “Slotted waveguide active phased arrays for mobile satellite terminals,” Invited paper at MRRS 2005, International Workshop on Microwaves, Radar and Remote Sensing, Kiev, Ukraine, 19-21 Sept. 2005.
[24c] A. Ocera, R. Vincenti Gatti, P. Mezzanotte, P. Farinelli, R. Sorrentino, “A MEMS Programmable Power Divider / Combiner,” 35th European Microwave Conference, Paris, France, 3-7 Oct. 2005.
[25c] B. Mencagli, R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “Design of large mm-wave beam-scanning reflectarrays,” 35th EuMC, European Microwave Conference, Paris, France, 3-7 Oct. 2005.
[26c] L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, “A novel low cost solution for 2-D smart antenna systems with interference nulling capabilities,” 17th APMC, Asia Pacific Microwave Conference, Suzhou, China, 4-7 Dec. 2005.
[27c] R. Sorrentino, R. Vincenti Gatti, L. Marcaccioli, B. Mencagli, “Beam Steering Reflectarrays,” 4th ESA Workshop on Millimetre Wave Technology and Applications, The 8th Topical Symposium on Millimetre Waves TSMMW2006, The 7th MINT Millimeter-Wave International Symposium MINT-MIS2006, 15-17 February 2006, Espoo, Finland.
[28c] R. Vincenti Gatti, A. Ocera, L. Marcaccioli, R. Sorrentino, “A Dual Band Reconfigurable Power Divider for WLAN Applications,” IEEE MTT-S, International Microwave Symposium, San Francisco, CA, USA, 11-16 June 2006.
[29c] M. Mongiardo, M. Patassini, R. Sorrentino, C. Tomassoni, R. Vincenti Gatti, “2.4 GHz Folded Dipole Antenna Design for RFID Applications: a Numerical Investigation,” FACE 2006, 19 – 20 June 2006, Victoria, BC, Canada.
[30c] L. Marcaccioli, B. Mencagli, R. Vincenti Gatti, T. Feger, T. Purtova, H. Schumacher, R. Sorrentino,”Beam Steering MEMS mm-Wave Reflectarrays,” MEMSWAVE 2006, Orvieto, Italy, June 27-30, 2006.
[31c] R. Vincenti Gatti, A. Ocera, L. Marcaccioli, R. Sorrentino, “Innovative Dual Band Reconfigurable Beam Forming Network for Conformal Arrays,” 36th EuMC, European Microwave Conference, Manchester, UK, 10-15 Sept. 2006.
[32c] A. Ocera, E. Sbarra, R. Vincenti Gatti, R. Sorrentino, “An Innovative Reconfigurable Reflection-Type Phase Shifter for Dual Band WLAN Applications,” 36th EuMC, European Microwave Conference, Manchester, UK, 10-15 Sept. 2006.
[33c] E. Sbarra, A. Ocera, R. Vincenti Gatti, R. Sorrentino, “A Novel Dual Band Analog Phase Shifter for Smart Antenna Systems, ” MMS’2006, Genova, Italy, 19-21 Sept. 2006.
[34c] M. Alunno Corbucci, R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, “A Compact Dual-Band Antenna for WLAN Applications, ” EuCAP 2006, Nice, France, 6-10 Nov. 2006.
[35c] R. Sorrentino, R. Vincenti Gatti, L. Marcaccioli, B. Mencagli “Electronic Reconfigurable MEMS Antennas,” Invited paper at EuCAP 2006, Nice, France, 6-10 Nov. 2006.
[36c] R. Sorrentino, R. Vincenti Gatti, L. Marcaccioli, A. Ocera, E. Sbarra, M. Alunno Corbucci, “Dual Band Reconfigurable Beam Forming Networks for WLAN Applications,” Invited paper at 18th Asia Pacific Microwave Conference, Yokohama, Japan, 12-15 Dec. 2006.
[37c] M. Albani, T. Cadili, F. Di Maggio, R. Gardelli, A. Incorvaia, C. Mollura, I. Pomona, M. Russo, E. Sbarra, R. Sorrentino, R. Vincenti Gatti, “2-D Electronic Beam Steering Phased Array for Mobile Satellite Communication Systems,” 29th ESA Workshop on Multiple Beam and Reconfigurable Antennas, ESA/ESTEC Noordwijk, The Netherlands, 18-20 April 2007.

[38c] R. Vincenti Gatti, A. Ocera, S. Bastioli, L. Marcaccioli, R. Sorrentino, "A Novel Compact Dual Band Reconfigurable Power Divider for Smart Antenna Systems," IEEE MTT-S, International Microwave Symposium, Honolulu, Hawaii, 3-8 June 2007.

[39c] B. Mencagli, P. Farinelli, L. Marcaccioli, R. Vincenti Gatti, B. Margesin, F. Giacomozzi, R. Sorrentino, "Design and Realization of a MEMS Tuneable Reflectarray for mm-wave Imaging Application," MEMSWAVE 2007, Barcelona, Spain, June 26-29, 2007.

[40c] E. Sbarra, L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, "A Novel Rotman Lens in SIW Technology," 37th EuMC, European Microwave Conference, Munich, Germany, 8-12 Oct. 2007.

[41c] E. Sbarra, L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, "A Novel Rotman Lens in SIW Technology," 4th EURAD, European Radar Conference, Munich, Germany, 10-12 Oct. 2007.

[42c] F. Casini, R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, "A Novel Design Method for Blass Matrix Beam-Forming Networks," 37th EuMC, European Microwave Conference, Munich, Germany, 8-12 Oct. 2007.

[43c] M. Albani, T. Cadili, F. Di Maggio, R. Gardelli, A. Incorvaia, C. Mollura, I. Pomona, M. Russo, E. Sbarra, R. Sorrentino, R. Vincenti Gatti, "A 2-D Electronic Beam Steering Phased Array for Point-Multipoint Communication Applications," 37th EuMC, European Microwave Conference, Munich, Germany, 8-12 Oct. 2007.

[44c] R. Vincenti Gatti, L. Marcaccioli, E. Sbarra and R. Sorrentino, "Flat Array Antennas for Ku-Band Mobile Satellite Terminals," 30th ESA Antenna Workshop on Antennas for Earth Observation, Science, Telecommunications and Navigation Space Missions, ESA/ESTEC Noordwijk, The Netherlands, 27-30 May 2008.

[45c] S. Ebadi, R. Vincenti Gatti and R. Sorrentino, "Linear Reflectarray Antenna Design Using 1-bit Digital Phase Shifters," 3rd European Conference on Antennas and Propagation, EuCAP 2009, Berlin, Germany, 23-27 March 2009.

[46c] R. Sorrentino, R. Vincenti Gatti, L. Marcaccioli, "Recent Advances on Millimetre Wave Reconfigurable Reflectarrays," 3rd European Conference on Antennas and Propagation, EuCAP 2009, Berlin, Germany, 23-27 March 2009.

[47c] R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, "Millimetre Wave Reconfigurable Reflectarrays," 5th ESA Workshop on mm-wave Technology and Applications & 31st ESA Antenna Workshop, ESA/ESTEC Noordwijk, The Netherlands, 18-20 May 2009.

[48c] E. Sbarra, L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, "Ku-band analogue phase shifter in SIW technology," 39th EuMC, European Microwave Conference, Rome, Italy, 29 Sept-1 Oct. 2009.

[49c] F. Casini, R. Vincenti Gatti, V. Perrone, R. Sorrentino, "A new approach to the analysis and synthesis of lossy reconfigurable matching networks," 39th EuMC, European Microwave Conference, Rome, Italy, 29 Sept-1 Oct. 2009.

[50c] S. Montori, L. Marcaccioli, R. Vincenti Gatti, R. Sorrentino, "Constant-phase dual polarization MEMS-based elementary cell for electronic steerable reflectarrays," 39th EuMC, European Microwave Conference, Rome, Italy, 29 Sept-1 Oct. 2009.

[51c] R. Vincenti Gatti, S. Ebadi, R. Sorrentino, "Scattering Matrix Approach to the Design of Infinite Planar Reflectarray Antennas," 39th EuMC, European Microwave Conference, Rome, Italy, 29 Sept-1 Oct. 2009.

[52c] S. Ebadi, R. Vincenti Gatti, L. Marcaccioli, R. Sorrentino, "Near Field Focusing in Large Reflectarray Antennas Using 1-bit Digital Phase Shifters," 39th EuMC, European Microwave Conference, Rome, Italy, 29 Sept-1 Oct. 2009.

[53c] R. Vincenti Gatti, R. Sorrentino, "A Fast and Accurate CAD Tool for Slotted Waveguide Arrays," IEEE COMCAS 2009, Tel Aviv, Israel, 9-11 Nov. 2009.

[54c] L. Marcaccioli, S. Montori, R. Vincenti Gatti, E. Chiuppesi, P. Farinelli, and R. Sorrentino, "RF MEMS-Reconfigurable Architectures for Very Large Reflectarray Antennas", Asia Pacific Microwave Conference, APMC 2009, Singapore, Singapore, 7-10 December 2009.

[55c] S. Montori, F. Cacciamani, R. Vincenti Gatti, E. Carrasco, M. Barba, J. Encinar, R. Sorrentino, "Wideband Dual-Polarization Reconfigurable Elementary Cell for Electronic Steerable Reflectarray at Ku-Band," 4th European Conference on Antennas and Propagation, EuCAP 2010, Barcelona, Spain, 12-16 April 2010.

[56c] H. El Gannudi, R. Vincenti Gatti, C. Tomassoni, R. Sorrentino, "Preliminary Design of Foldable Reconfigurable Reflectarray for Ku-Band Satellite Communication," 4th European Conference on Antennas and Propagation, EuCAP 2010, Barcelona, Spain, 12-16 April 2010.

[57c] E. Carrasco, J. A. Encinar, M. Barba, R. Vincenti Gatti, R. Sorrentino, "Dual-polarization reflectarray elements for Ku-band Tx/Rx portable terminal antenna" 4th European Conference on Antennas and Propagation, EuCAP 2010, Barcelona, Spain, 12-16 April 2010.

[58c] Simone Montori, Luca Marcaccioli, Roberto Vincenti Gatti, Roberto Sorrentino, "1-bit RF-MEMS-Reconfigurable Elementary Cell for Very Large Reflectarray", MMS'2010, Mediterranean Microwave Symposium 2010, Cyprus, 25-27 Aug. 2010.

[59c] S. Montori, C. Fritzsch, L. Marcaccioli, R. Vincenti Gatti, R. Jakoby, R. Sorrentino, "Design and Measurements of a 1-bit Reconfigurable Elementary Cell for Large Electronic Steerable Reflectarrays", 40th EuMC, European Microwave Conference, Paris, France, 28-30 Sept. 2010.

[60c] C. Tienda, J. A. Encinar, S. Montori, R. Vincenti Gatti, M. Arrebola and R. Sorrentino, "Dual-Reflectarray antenna for bidirectional satellite link in Ku Band", European Conference on Antennas and Propagation 2011, 11-15 April 2011, Rome.

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