Broadband Monolithic Constrained Lens Design

by

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Glossary

2D	Two dimensional
3D	Three dimensional
BEM	Boundary integral method
DXF	Data exchange format and AutoCAD file extension
COTS	Commercial off-the-shelf
FEM	Finite element method
FIT	Finite integration technique
FTDT	Finite difference time domain
GERBER	File type for printed circuit board manufacture
HPBW	Half power beamwidth
LSFEM	Least squares finite element method
mm	Millimetre
MoM	Method of moments
NRD	Nonradiative dielectric
PCB	Printed circuit board
PNA	Performance network analyzer
R2R	Circular constrained lens topology
RAM	Radiation absorbing material
RF	Radio frequency
RKR	Circular constrained lens topology
SDM	Spectral domain method
SDMA	Space division multiple access
SMA	Sub-miniature version A connector
TEM	Transverse electromagnetic
TLM	Transmission line matrix
UDR	Unidirectional dielectric radiator
VNA	Vector network analyser

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Résumé

Leonard T. Hall obtained his BEng(Hons) from the School of Electrical and Electronic Engineering, The University of Adelaide in 1999. His PhD thesis is in area of broadband monolithic lens design. In 2002-2003 he was the Chair of the student South Australian division of the IEEE. Since 2004 he has acted as a consultant in millimetre wave radar and antenna design. In 2005, he took up a position at The University of Adelaide as a postdoctoral fellow working on a 60 GHz wireless networking transceiver.

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