CURRICULUM VITAE

Prof. Dr. Ahmet Aksen

Personal Information

Date/Place of Birth: 1960, Konya

Marital Status : Married, two children

Languages : English and German

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Isik University, 34980, Sile, Istanbul

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Education

Ph. D. *in Electronics Engineering, February 1994,*

Lehrstuhl für Nachrichtentechnik, Ruhr-Universitaet Bochum, Germany.

M.Sc. *in Electronics Engineering*, February 1985,

Middle East Technical University, Ankara, Turkey.

B.Sc. *in Electrical and Electronics Engineering*, June 1981,

Middle East Technical University, Ankara, Turkey.

Employment

2002 - ***Professor***

Isik Üniversity, Electronics Engineering Department, Istanbul.

1997 - 2002 ***Associate Professor***

Isik Üniversity, Electronics Engineering Department, Istanbul.

1996 - 1997 ***Associate Professor***

Istanbul Üniversity, Electrical and Electronics Engineering Department, Istanbul.

1995 - 1996 ***Assistant Professor***

Istanbul Üniversity, Electrical and Electronics Engineering Department, Istanbul.

1989 - 1995 ***Research Assistant***

Ruhr-Üniversitaet Bochum, Lehrstuhl für Nachrichtentechnik, Bochum, Germany.

1983 - 1988 ***Research Assistant***

Middle East Technical University, Electrical and Electronics Engineering Department, Ankara.

1981 - 1983 ***Electronics Engineer***

PTT Turkish Telecom, Ankara.

Administrative Experience:

2005 -	Member of University Executive Council, Isik University, Istanbul
2005 -	Chairman of Electronics Engineering Department, Isik University, Istanbul
2000 - 2005	Chairman of Computer Engineering Department, Isik University, Istanbul
1997 - 1999	Vice Chairman of Electronics Engineering Department, Isik University, Istanbul
1997 - 2002	Director of Computer Center, Isik University, Istanbul
1996 -1997	Coordinator of Computer Center, FMV Isik Schools, Istanbul

Instructional Experience

Isik University, Electronics Engineering

- Microwave Circuit Design for Wireless Communications, (Graduate)
- Advanced Microwave Circuit Design, (Graduate)
- Microwave Amplifiers, (Graduate)
- Wireless Communications
- Microwave Engineering
- Electronics I, II
- Circuit Theory

Istanbul University, Electronics Engineering

- Advanced Network Theory, (Graduate)
- High Frequency Amplifiers
- Network Synthesis
- Digital Filters
- Electronic Circuit Components

Hacettepe University, Electronics Engineering

- Electronic Circuits and Systems

Middle East Technical University, Electronics Engineering

- Microwave and Antenna Lab.

Honors and Societies

TUBITAK- Turkey Scientific and Technical Research Institute, Education scholarship (1977-1984).

DAAD- Deutscher Akademischer Austauschdienst-Germany, Research fellowship (1988-1994).

IEEE- Institute of Electrical and Electronics Engineers, Member.

Research Interests

- Broadband Matching Theory, Real Frequency Broadband Matching
- Microwave Amplifier and Filter Design
- Multidimensional Network Theory
- Computer Aided Microwave Circuit Design

Publications

Book section

1. **A. Aksen**, B.S.Yarman,"Cascade synthesis of two-variable lossless two-port networks with lumped elements and transmission lines", in *Multidimensional Signals, Circuits and Systems*, Editors: K. Galkowski and J. Wood, Chapter 12, pp.219-232, Taylor and Francis, New York, 2001, (ISBN 0-415-25363-2(hbk))

Journal and Conference Papers

1. Lindberg, M. Senturk, B. Cimen, B. S. Yarman, A. Rydberg and **A. Aksen**, "Single Matching Network Design for a Dual Band PIFA Antenna Via Simplified Real Frequency Technique," 1st European Conference on Antennas and Propagation, Nice, France, November 2006

2. Yarman B.S., Sengül M., Kilinç A., **Aksen A**, (2005), "Circuit Model for Given Reflectance Data Constructed with Mixed Lumped and Distributed Elements", The Fourth International Workshop on Multidimensional (ND) Systems NDS 2005, Wuppertal, Germany, July 10-13 2005.

3. Sengül M., **Aksen A**, Yarman B.S., (2005), "Karisik Toplu ve Daginik Devre Elemanlari Içeren Merdiven Devrelerin Sentezi", Elektrik-Elektronik-Bilgisayar Mühendisligi 11. Ulusal Kongresi ve Fuari, Istanbul, 22-25 Eylül 2005.

4. B.S.Yarman, A.Kilinç, **A. Aksen**," Immitance Data modelling via linear Interpolation Techniques A Classical Circuit Theory Approach", *International Journal of Circuit Theory and Applications*, vol. 32, pp. 537-563, 2004.

5. **A. Aksen**, H.Pinarbasi, B.S.Yarman, "A Parametric Approach to Construct Two-Variable Positive Real Impedance Functions for the Real Frequency Design of Mixed Lumped-Distributed Matching Networks", *Proceedings of IEEE International Microwave Conference*, *IMS'2004,* pp. 1851-1854, Forth Worth, Texas, June 2004.

6. H.Pinarbasi, M.Sengül, **A. Aksen**, S.B.Yarman, "Genisbant Mikrodalga Devre Tasarim Paket Programi", *Elektrik, Elektronik ve Bilgisayar Mühendisligi Sempozyum kitabi*, ELECO 2004, Bursa, Aralik 2004.

7. **Ahmet Aksen**, B. S. Yarman, "A parametric approach to describe distributed two-ports with lumped discontinuities for the design of broadband MMICs", *Proceedings of IEEE International Symposium on Circuits and Systems ISCAS'2003*, Bangkok, Thailand, May 2003.

8. E.G..Cimen, S.Yarman, **Ahmet Aksen**, "Design and simulation of miniaturized communication systems employing symmetrical lossless two-ports constructed with two-kinds of elements", *Proceedings of IEEE International Symposium on Circuits and Systems ISCAS'2003*, Bangkok, Thailand, May 2003.

9. Ali Kilinç, H. Pinarbasi, Siddik Yarman, **Ahmet Aksen**, "Microwave Amplifier design for mobile communication via immitance data modeling", *Proceedings of International Symposium on Circuits and Systems ISCAS'2003*, Bangkok, Thailand, May 2003.

10. **Ahmet Aksen**, B.Siddik Yarman, "Scattering based Parametric description of lossless two-ports with commensurate lines and lumped discontinuity elements for MMICs", *Proceedings of ECCTD'2003 European Conference on Circuit Theory and Design*, VII, pp.21-24, Krakow, Poland, September 2003.

11. Haci Pinarbasi, Metin Sengül, **Ahmet Aksen**, B.Siddik Yarman, "Real frequency design of broadband microwave amplifiers with mixed lumped and distributed element equalizers for MMICs", *Proceedings of ELECO'2003, International Conference on Electrical and Electronics Engineering*, Bursa, Turkey, December 2003.

12. B.S. Yarman, **A. Aksen**, A.Kilinc, "Immitance Data Modelling via Linear Interpolation Techniques", *Proceedings of IEEE International Symposium on Circuits and Systems, ISCAS'2002*, Phoenix, Arizona, vol 2, pp. 527-530, May 2002.

13. **A. Aksen**, B.S. Yarman,"A Real Frequency approach to describe lossless two-ports formed with mixed lumped and distributed elements", *International Journal of Electronics and Communications (AEÜ)*, vol. 6, pp. 389-396, November 2001.

14. B.S.Yarman, **A. Aksen**, A.Kilinç, "An immitance based tool for modeling passive one-port devices by means of Darlington equivalents", *International Journal of Electronics and Communications (AEÜ)*, vol. 6, pp. 443-451, November 2001.

15. B.S. Yarman, E.G. Çimen, **A. Aksen**, "Description of symmetrical lossless two-ports in two kinds of elements for the design of microwave communication systems in MMIC Realization", *Proceedings of 15th European Conference on Circuit Theory and Design, ECCTD'2001*, Espoo, Finland, August 2001.

16. **A. Aksen**, B. S. Yarman, "Design of microwave amplifiers using distributed equalizers with lumped discontinuities for hybrid and monolithic MIC realizations", *Proceedings of Progress in Electromagnetics Research Symposium, PIERS'2001,* Osaka, Japan, July 2001.

17. **A. Aksen**, B. S. Yarman, "A computer aided design technique for hybrid and monolithic microwave amplifiers employing distributed equalizers with lumped discontinuities", *Proceedings of IEEE Int. Microwave Symposium, IMS'2001*, Arizona, USA, May 2001.

18. B.S. Yarman, **A. Aksen**, "A reflectance-based computer aided modelling tool for high speed/high frequency communication systems", *Proceedings of IEEE International Symposium on Circuits and Systems, ISCAS'2001*, Sydney, Australia, May 2001.

19. B.S.Yarman, A.Kilinç, **A. Aksen**, "A systematic procedure to model measured data obtained from a passive physical device by means of its Darlington Equivalent", *First IEEE Balkan Conference on Signal Processing, Communications, Circuits and Systems,* Istanbul, June 2000.

20. S. Yarman, A. Sertbas, **A. Aksen**, "A computer-aided design technique for analog RF circuits with lumped and distributed element interconnect models", *First IEEE Balkan Conference on Signal Processing, Communications, Circuits and Systems*, Istanbul, June 2000.

21. B.S.Yarman, E.G.Çimen, **A. Aksen**, A.Sertbas, "Explicit descriptive equations to construct symmetrical lossless two ports with mixed lumped and distributed elements", *IEEE Balkan Conference on Signal Processing, Communication, Circuits and Systems*, Istanbul, June 2000.

22. B.S.Yarman, F.Günes, T.Bazan, **A. Aksen**, "Potential broadband characteristics of a microwave transistor and realization conditions", *IEEE Balkan Conference on Signal Processing, Communications, Circuits and Systems*, Istanbul, June 2000.

23. A.Sertbas, **A. Aksen**, B.S. Yarman, "Explicit formulas for a special class of two-variable resonant ladder networks with simple lumped elements and commensurate stubs", *International Conference on Electrical and Electronics Engineering, ELECO'99*, pp.132-135, Bursa, Dec. 1999.

24. A.Sertbas, **A. Aksen**, B.S.Yarman, "Construction of analog RF circuits with lumped and distributed components for high speed/high frequency mobile communication MMICs," *Proceedings of the European Conference on Circuit Theory and Design, ECCTD'99*, pp.1123-1126, Stresa, Italy, September 1999.

25. **A. Aksen**, E.G. Çimen, B.S. Yarman, "A numerical real frequency broadband matching technique based on parametric representation of scattering parameters", *Proceedings of IEEE Asia Pacific Conference on Circuits and Systems, APCCAS'98*, pp.351-354, Chiangmai, Thailand, November 1998.

26. A.Sertbas, **A. Aksen**, B.S.Yarman, “Construction of some classes of two-variable lossless ladder networks with simple lumped elements and uniform transmission lines”, *Proceedings of IEEE Asia Pacific Conference on Circuits and Systems, APCCAS’98*, pp.295-298, Chiangmai, Thailand, November 1998.

27. **A. Aksen**, B.S. Yarman, “Cascade synthesis of two-variable lossless two-port networks of mixed, lumped elements and transmission lines: A semi-analytic procedure”, *Proceedings of the First International Workshop on Multidimensional Systems, NDS-98*, pp.35-37, Technical University of Zielona Gora, Poland, July 1998.

28. Sertbas, B.S. Yarman, **A. Aksen**, “Explicit two-variable description of a class of band-pass lossless two-ports with mixed, lumped elements and transmission lines ”, *Proceedings of the First International Workshop on Multidimensional Systems, NDS-98*, pp.45-47, Technical University of Zielona Gora, Poland, July 1998.

29. **A. Aksen**, E.G. Çimen, B.S. Yarman, “ Saçilma parametrelerinin parametrik tanimi ile bilgisayar destekli genis bandli empedans uyumlastirma”, *Çukurova Universitesi, Elektrik-Elektronik Mühendisligi Bölümü, 10.Yil Sempozyumu*, s.18-20, Adana, Subat 1998..

30. A. Sertbas, B.S. Yarman, **A. Aksen**, “Mikrodalga kuvvetlendiricileri için band-geçiren tip karma (toplu-dagilmis) elemanli dengeleyici tasarimi”, *Çukurova Üniversitesi, Elektrik-Elektronik Mühendisligi Bölümü, 10.Yil Sempozyumu*, s.84-89, Adana, Subat 1998.

31. B.S. Yarman, N. Bagci, **A. Aksen**, ”The role of projects in student centered education ”, *International Conf. on New Trends in Science Education, FMVCE’97,* Istanbul, May 1997.

32. **A. Aksen**, B.S. Yarman,'' A semi-analytic method to design microwave networks with mixed lumped elements and transmission lines '', *Proceedings of Progres in Electromagnetics Research Symposium, PIERS’96*, University of Insbruck, Austria, July 1996.

33. E.G. Çimen, B.S. Yarman, **A. Aksen**, “Kayipsiz iki kapili devrelere ait ölçüm verilerinin dagilmis elemanlarla modellenmesi”, *Elektrik mühendisligi 6. Ulusal kongresi*, Bursa, Eylül 1995.

34. **A. Aksen**, B.S. Yarman, ''A semi-analytic procedure to describe lossless two-ports with mixed lumped and distributed elements'', *Proceedings of International Symposium on Circuits and Systems, ISCAS'94*, pp. 205-208, London, England, May 1994.

35. **A. Aksen**, B.S. Yarman, ''Construction of low-pass ladder networks with mixed lumped and distributed elements'', *Proceedings of European Conference on Circuit Theory and Design, ECCTD'93*, vol.1, pp. 1388-1393, Davos, Switzerland, September 1993.

36. B.S. Yarman, **A. Aksen**, ''An integrated design tool to construct lossless matching networks with mixed lumped and distributed elements'', *IEEE Transactions on Circuits and Systems Fundamental Theory and Applications*, CAS-39, Nr.9, pp.713-723, September 1992.

37. B.S. Yarman, **A. Aksen**, A. Fettweis, '' An integrated design tool to construct lossless matching networks with mixed lumped and distributed elements'', *Proceedings of 10'th European Conferance on Circuit Theory and Design, ECCTD'91*, vol.3, pp.1280-1289, Copenhagen, Denmark, September 1991.

38. B.S. Yarman, **A. Aksen**, A. Fettweis, ''An integrated design tool to construct lossless two-ports with mixed lumped and distributed elements for matching problems '', *Proceedings of 3'rd International Symposium on Recent Advances in Microwave Technology, ISRAMT'91*, vol. 2, pp. 570-573, Reno, Nevada, USA, August 1991.

39. **A. Aksen**, N. Yildirim, "Broadbanding branch-line couplers by matching and optimization", *Mediterranean Elektrotechnical Conference, MELECON'85, Proceedings on Radio-communication*, pp.85-88, , Madrid, Spain, September 1985.

40. **A. Aksen**, N.Yildirim, "Uyumlama ve iyilestirme yöntemi ile genis bandli merdiven tipi yönlü baglaçlarin bilgisayarla tasarimi ve gerçeklestirilmesi", *Birinci ulusal elektrik mühendisligi sempozyumu kitabi*, pp. 529-534, Agustos, 1985, Adana.

Theses

- **A. Aksen**, " Design of lossless two-ports with mixed lumped and distributed elements for broadband matching", *Ph.D Dissertation*, Ruhr-Universitaet Bochum, Fakültaet für Elektrotechnik, Lehrstuhl für Nachrichtentechnik, February 1994, Bochum, Germany.

- **A. Aksen,** "Computer oriented design and construction of broadband branch-line couplers by matching and optimization", *M.Sc. Thesis*, Middle East Technical University, Electronics Engineering Department, February 1985, Ankara, Turkey.