



# CURRICULUM VITAE

(as of December 31,  
2018)



**Sven Ove Granstrand**

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## CURRICULUM VITAE (as of December 31, 2018)

**Name** Sven Ove Granstrand  
**Born** August 1944 in Sweden

### I. EDUCATION

M.Sc., Chalmers University of Technology (Mechanical Engineering 1969)  
M.Sc., University of Gothenburg (Mathematics 1969, Excellent with Distinction in Mathematics 1971) MBA,  
Graduate School of Business in Gothenburg (Excellent with Distinction in Business Economics 1971) M.Sc.,  
Stanford University (Operations Research, 1972)  
Ph.D., Department of Industrial Management, Chalmers University of Technology, 1979

### II. POSITIONS

Teaching assistant	Dep't of Control Engineering, Chalmers Univ. of Technology	1968-69
Operations research assistant	Albert Heijn Co., Zaandam, Holland	Summer 1969
Assistant	Dep't of Industrial Management Chalmers Univ. of Technology	Autumn 1969
Lecturer in Operations Research and Decision Analysis	-'-	1970
Captain in the Swedish Artillery Reserve (graduated as number one at the cadet school)	A6, Jönköping	Appointed Jan. 1, 1973
Acting professor, part-time	Dep't of Industrial Management Chalmers Univ. of Technology	Sept. 1980- Jan. 1981
Associate professor (‘oavlönad docent’)	-'-	Appointed Febr. 4, 1981
Research assistant (‘forskarassistent’)	-'-	July 1, 1981- Febr. 28, 1986
Professor in Industrial Management and Economics	-'-	March 1, 1986-
Chairman	Centre for Industrial Production and Economics (CIPE), Chalmers Univ. of Technology	July 1, 1986-1999
Research program leader for the Technology and Management area	Institute for Management of Innovation and Technology (IMIT)	1985-1995
Member of the Governing Board	University of Jönköping	Jan. 1995 - Jan. 1998
Member of the Industrial Research Committee (IFG)	Royal Academy of Engineering Sciences (IVA)	1987-1989

Academy Member	Royal Academy of Engineering Sciences (IVA)	1993-
Chairman and Co-founder	Center for Intellectual Property Studies (CIP), Chalmers University of Technology & School of Economics and Commercial Law, Gothenburg University	July 1, 2000-
Member of the Governing Board	Academy of Board Members	1997-2000
Member of Company Boards	Various companies in Sweden and abroad	1998-
Member of EC expert group	ETAN Working Group for the European Commission on 'Strategic Dimensions of IPRS in the context of Science and Technology Policy'	1998-2000
Member of EC expert group (Rapporteur)	'IPR Aspects on Internet Collaborations'	2000-2001
Member of EC expert group	'Role and Strategic use of IPR in International Research Collaboration'	2001
Member of EC expert group (Chairman)	'IPR Systems in ICT-based Research'	2003
Research Fellow	Institute for Management of Innovation and Technology (IMIT)	1995-
Founding member	European Institute of Technology and Innovation Management (EITIM)	2000

### III. RESEARCH

#### 1. Areas of past and current research interest

- Various aspects of the economics and management of technology and innovation, for example the history of corporations and technology, management of R&D and innovation, organization theory, technological economics, innovation economics, diffusion theory, growth theory, competitive analysis and relations between technological and social change.
- Information and communication technologies
- Technology based business development and technology marketing
- Applied mathematics, especially within micro-economics
- Investment and financing
- Technology and industrial policy-making
- Intellectual property rights and intellectual capital
- Techno-economic analysis – theories and methods.

#### 2. Research publications

- 1) 'Mathematical Programming Models for Investment Decisions.' Presented at the Nordic OR-Conference in Copenhagen, 1973. (Research Report R-1-1973. Dept. of Industrial Management, Chalmers University of Technology.)
- 2) 'The Use of Topological Concepts in Planning and Organization Theory.' Presented at the first conference in Management Science in Sweden, Stockholm, 1974. (Research Report R-2-1974. Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 3) 'Strategic Management of Industrial R&D.' Working paper presented at a conference on Product Development at the Stockholm School of Economics, Stockholm, 1975.
- 4) 'An Excursion into the Concept of Cognitive Entropy.' Coauthored with Sven Söderberg, Dept. of Psychology. Working paper presented at the second conference on Management Science in Sweden, Linköping, 1975.
- 5) 'Technological Change and Subcultures in the Corporation.' Working paper presented at a seminar at the European Institute for Advanced Studies in Management, EIASM, Brussels, 1978.
- 6) 'R&D and Corporate Policy making.' Working paper presented at a seminar at EIASM, Brussels, 1978.
- 7) 'Coordination of Multinational R&D.' Coauthored with Ingemar Fernlund, SKF Corporation. In *R&D Management*, 1978, Vol. 9, No. 1, October 1978, pp. 1-7. (CIM Report 1982:03, Dept. of Industrial Management, Chalmers University of Technology.)

- 8) 'R&D, Corporate Growth and Diversification.' Paper presented at a conference at the International Institute of Management, Berlin 1978. Published in Sahal, D. (ed.): *Research, Development and Technological Innovation*, Lexington Book Program, D.C. Heath & Co, Massachusetts, 1980.
- 9) 'Technological Change, Subcultures and Conflicts.' Paper presented at a conference at Centre National de la Recherche Scientifique, Paris, 1979.
- 10) *Technology, Management and Markets: An Investigation of R&D and Innovation in Industrial Organizations*. Dept. of Industrial Management, Chalmers University of Technology, 1979, 417 pp. (Diss.) Revised edition published by Frances Pinter Publishers, London, 1982.
- 11) 'R&D and Corporate Internationalization.' Paper presented at a conference on Industrial R&D Strategy and Management at Manchester Business School, 1980. (Research Paper No. 81/10 E at Institute of International Business, Stockholm School of Economics.)
- 12) 'R&D and Industrial Organization Structures.' Paper presented at the IV International Conference on Management of Research, Development and Education at the Technical University of Wroclaw, Poland, 1980. Published in Proceedings by the Futures Research Center of the Technical University of Wroclaw, Poland, 1980. (CIM Report 1982:07, Dept. of Industrial Management, Chalmers University of Technology.)
- 13) 'Tvärteknologi i industriell forskning och utveckling.' (Research Report No. 61, Series 2 at Dept. of Theory of Science, University of Gothenburg, March 1981.) (CIM Working Paper 1982:02, Dept. of Industrial Management, Chalmers University of Technology. (In Swedish.)
- 14) 'Imports substitution eller exportsatsning för Sverige – två olika utvecklingsstrategier'. (In Swedish.)
- 15) 'Företagsforskning.' Coauthored with Holger Bohlin, Chalmers University of Technology and Anders Lundgren, Bengt Stymne, Stockholm School of Economics. Report published by Företagsekonomiska Föreningen, Stockholm, 1980. (In Swedish.)
- 16) 'The Role of Technology Trade in Swedish Companies.' Paper presented at a conference on Technology Transfer at the International Institute of Management, Science Center, Berlin, 1980. (Research Paper No. 81/3 E at Institute of International Business, Stockholm School of Economics.) (CIM Report 1982:02, Dept. of Industrial Management, Chalmers University of Technology.)
- 17) 'Technological and Industrial Policy in China and Europe.' Proceedings from the first joint TIPCE Conference 1981. Co-edited with Jon Sigurdson, Research Policy Institute. Published by the Research Policy Institute, Lund, Sweden, 1981.
- 18) 'Incentives and Limits for Innovation and Technology Transfer – the Case of Sweden.' Paper presented at a conference on Technology and Industrial Policy in China and Europe, at the Research Policy Institute, Lund, 1981. Published in 17). (CIM Report 1982:06, Dept. of Industrial Management, Chalmers University of Technology.)

- 19) 'The Financing of New Technological Investments.' Coauthored with Gunnar Eliasson, Industrial Institute for Economic and Social Research. Paper presented at a conference on Technology and Industrial Policy in China and Europe, at the Research Policy Institute, Lund, 1981. Published in 17). Also presented at the IIASA seminar on Innovation Management in Telecommunications, Budapest, March 29-31, 1982. Published in Proceedings, by IIASA, Wien, 1982. (CIM Report 1982:05, Dept. of Industrial Management, Chalmers University of Technology.)
- 20) 'Innovation Economy and Technology Transfer.' Final report submitted to the National Swedish Board for Technical Development, January 1982.
- 21) 'The Development of Technology Based Businesses. A study of venture development units.' (CIM Report 1983:01, Dept. of Industrial Management, Chalmers University of Technology.)
- 22) 'Educating Engineers in Product Development.' Paper presented at the SEFI conference on The Education of the Engineer for Innovative and Entrepreneurial Activity, Technical University of Delft, Holland, June 1982. Published in Proceedings by Delft University Press, 1982. (CIM Report 1982:04, Dept. of Industrial Management, Chalmers University of Technology.)
- 23) 'Venture Capital and Management.' Coauthored with Gunnar Eliasson Industrial Institute for Economic and Social Research. Paper presented at the Second TIPCE-conference at Science Policy Research Unit, University of Sussex, Brighton, September 1982. (CIM Working Paper 1982:07, Dept. of Industrial Management, Chalmers University of Technology.)
- 24) 'Technology Management in Large Companies. Some important trends and research needs.' Report submitted to the National Swedish Board for Technical Development, February 1983. (CIM Report 1984:08, Dept. of Industrial Management, Chalmers University of Technology.)
- 25) 'Innovation Economy and Business Development. A Study of Innovation Take-Overs.' Coauthored with Susanne Jacobsson. Final report submitted to the National Swedish Board for Technical Development, June 1983. (CIM Report 1983:08, Dept. of Industrial Management, Chalmers University of Technology.)
- 26) 'The Role of Public Procurement in Technological Innovation and Industrial Development in the Telecommunication Sector.' Coauthored with Jon Sigurdson, Research Policy Institute, University of Lund. Paper prepared for the NORTEL conference in Oslo June 21-22, 1983 on The Role of Public Procurement in Technological Innovation and Industrial Development in the Telecommunication Sector in the Nordic Countries. Published in proceedings by NORDFORSK, Stockholm. Abridged version prepared for the IIASA Study on Innovation Management in Electro Technology Task Meeting on Strategic and Long-Term Planning in Innovation Management in Budapest, December 5-9, 1983. (CIM Report 1983:09, Dept. of Industrial Management, Chalmers University of Technology.)
- 27) 'Measuring and Modelling Innovative New Entry in Swedish Industry.' Paper prepared for the IUI-conference in Stockholm-Saltsjöbaden, August 29-31, 1983 on The Dynamics of Decentralized (Market) Economies. Published in Day, Richard H. and Eliasson, Gunnar (eds.): *The Dynamics of Market Economies*, North-Holland, Amsterdam, 1986.
- 28) 'Möjligheter och begränsningar för brukarorienterad produktutveckling i en marknadsekonomi.' ('Possibilities and limitations for user-oriented product development in a market economy.') September 1983. (CIM Working Paper 1983:03, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)

- 29) 'The Conduct of Technology Intelligence Operations in Industry.' Paper prepared for the workshop on Technological Information from Abroad, arranged by Six Countries Programme on Aspects of Government Policies Towards Technological Innovation in Industry, The Hague, December 12-13, 1983. (CIM Working Paper 1984:03, Dept. of Industrial Management, Chalmers University of Technology.)
- 30) 'The Choice of Marketing Organization for New Products.' Discussion paper prepared for a seminar arranged by the Marketing Technology Center, Stockholm, January 25, 1984. (CIM Report 1984:07, Dept. of Industrial Management, Chalmers University of Technology.)
- 31) 'An Industrial Organization Comparison of the Nordic Telecommunication Sectors with Special Emphasis on Technology Procurement.' Chapter contribution to the final report on telecommunications in the Nordic countries (the Nortel-project), February 1984. Published by Nordforsk, Stockholm.
- 32) 'Innovation Policies in East Asia and Some Implications for West Europe.' Coauthored with Jon Sigurdson, Research Policy Institute. Paper prepared for an international seminar on Design and Innovation: Policy and Management, arranged by the Department of Design Research, Royal College of Art, London, April 16-18, 1984. Published in Langdon, R. and Rothwell, R. (eds.): *Design and Innovation*, Frances Pinter, London, 1985. (CIM Report 1984:04, Dept. of Industrial Management, Chalmers University of Technology.)
- 33) 'Technological Change and Market Entry and Exit in Swedish Industry.' Paper prepared for the Joint SSTC/IFIAS/TIPCE Roundtable Meeting on Guidelines for Science and Technology Policy for Development in Beijing, People's Republic of China, May 4-8, 1984. (CIM Report 1984:05, Dept. of Industrial Management, Chalmers University of Technology.)
- 34) 'Managing Innovation in Drug Industry.' Coauthored with Ivan Östholm, Astra-Hässle Company. Article submitted to *Research Management*, 1984.
- 35) 'Technology Procurement as a Special Form of Buyer-Seller Interaction in Industrial Marketing.' Paper prepared for the International Research Seminar on Industrial Marketing, arranged by the Stockholm School of Economics and the Marketing Technology Center in Stockholm, August 29-31, 1984. (CIM Report 1984:06, Dept. of Industrial Management, Chalmers University of Technology.)
- 36) 'Technology & Strategies in Large Companies. A study of corporate development and entrepreneurship.' Research Program Description. Coauthored with Bohlin, H., Jacobsson, S., Svensson, P., Westerlund, A. (CIM Working Paper 1984:04, Dept. of Industrial Management, Chalmers University of Technology.)
- 37) 'Financial Innovation. A study of the sources, patterns of diffusion and impact of financial innovations.' Final project report, October 1984. (CIM Working Paper 1985:01, Dept. of Industrial Management, Chalmers University of Technology.)
- 38) 'The Choice of Production Technology and Organization for New Products.' October 1984. (CIM Working Paper 1984:06, Dept. of Industrial Management, Chalmers University of Technology.)
- 39) 'The Evolution of the Video Cassette Recorder Industry and the Main Frame Computer Industry in Japan.' (CIM Working Paper 1984:07, Dept. of Industrial Management, Chalmers University of Technology.)

- 40) 'Patterns of International Marketing of Technology Intensive Products.' Working paper, October 1984.
- 41) 'Innovation Joint Developments.' Working paper, October 1984.
- 42) 'Diskriminantanalys vid success/failure – studier i företagsekonomi.' Working paper, October 1984. (In Swedish.)
- 43) 'Stimulans av immateriella investeringar genom skatteavdrag.' (CIM Working Paper 1985:02, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 43b) 'A note on possible changes in international patenting behaviour.' September 1985.
- 44) 'Representation av diskonteringsoperationer.' Working paper, January 1985. (In Swedish.)
- 45) 'The Size, Growth and Acquisitions of Small Technology Based Companies.' Working paper, January 1985.
- 46) 'Technological Innovation and Industrial Development in Telecommunications'. Co-edited with Jon Sigurdson. Published by Nordforsk and Research Policy Institute, Lund, Sweden, 1985.
- 47) 'Ledarskap i Ericsson inför tekniska förändringar.' Coauthored with Lars Olof Norén. Published in Danielsson, A. et al.: *Samtal om Ledarskap, Ledning & Ledare*, Svenska Dagbladets förlag, Stockholm, 1986. (In Swedish.)
- 48) 'The Modelling of Buyer/Seller-Diffusion Processes. A novel approach to modelling diffusion and simple evolution of market structure.' Paper presented at the conference on Innovation Diffusion in Venice, March 18-22, 1986. Published in David, P.H. et al. (eds.): *Advances in Modelling Innovation Diffusion*, Oxford University Press. (Never published).
- 49) 'Autonomous, Corporate or State Entrepreneurship? – the cases of Sweden and Tanzania.' Coauthored with Sverker Alänge. (CIM Report 1986:03, Dept. of Industrial Management, Chalmers University of Technology.)
- 50) 'Samspelet samhälle - näringsliv inom den svenska telekommunikationssektorn.' 1987. (In Swedish.)
- 51) 'Technological Substitution and Industrial Change.' Paper prepared for the RICE-symposium, University of Karlstad, Sweden, June 22-26, 1987. (CIM Report 1987:01, Dept. of Industrial Management, Chalmers University of Technology.)
- 52) 'Managing Innovation in Multi-Technology Corporations.' Paper prepared for the symposium on Managing Innovation in Large Complex Corporations, INSEAD, Fontainebleau, France, August 31- Sept 2, 1987. (CIM Working Paper 1987:01, Dept. of Industrial Management, Chalmers University of Technology.)
- 52b) 'Managing Innovation in Multi-Technology Corporations.' Published in *Research Policy*, Vol. 19, No. 1, 1990, pp. 35-60. (See also CV No. 85.)
- 53) 'Technology Management in Multi-Technology Corporations. Some Swedish experiences.' Paper presented at the conference on Modern Approaches to Management and Organization, Karl Marx University of Economics, Budapest, September 3-4, 1987.



- 54) 'Patents and Innovation. A Study of Patenting Practices and Trends in Sweden with a Brief Outlook on the US.', March 1988. Excerpts submitted to *Research Policy*. (CIM Working Paper 1988:04, Dept. of Industrial Management, Chalmers University of Technology.)
- 54b) 'The use of Patents for the Protection of Technological Innovation: A case study of selected Swedish firms.' Report prepared for United Nations Conference on Trade and Development, UNCTAD, Geneva, February 1988.
- 55) 'The Acquisition of Technology and Small Firms by Large Firms.' Coauthored with Sören Sjölander. Presented at the IUI-conference on Markets for Innovation, Ownership and Control, Stockholm, June 1988. Published in *Journal of Economic Behavior and Organization*, Vol. 13, 1990, pp. 367-386. (CIM Working Paper 1988:05, Dept. of Industrial Management, Chalmers University of Technology.)
- 56) 'Teknologi och management i Brasilien – Några intryck från en studieresa november 1988'. ('Technology and Management in Brazil') (CIM Working Paper 1989:06, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 57) 'Teknisk-ekonomisk styrning av telenätsutveckling – offensiva investeringar.' Coauthored with Erik Bohlin and Kristina Dahlin. March 1989. (In Swedish. Confidential.)
- 58) 'Some Concepts and Methods for Techno-Industrial Systems Analysis of Factory Automation.' Working paper, March 3, 1989.
- 59) 'Strategic Technology Management Issues in Japanese Manufacturing Industry.' Coauthored with Sören Sjölander and Sverker Alänge. In *Technology Analysis and Strategic Management*, Vol. 1, No. 3, 1989, pp. 259-272. (CIM Working Paper 1988:06, Dept. of Industrial Management, Chalmers University of Technology.)
- 60) 'Strategic Technology Issues in US Manufacturing Industry – A Critical Analysis.' Coauthored with Staffan Jacobsson, Sören Sjölander and Sverker Alänge. (CIM Working Paper 1989:03, Dept. of Industrial Management, Chalmers University of Technology.)
- 61) 'The Evolution of Corporate Entrepreneurship in Swedish Industry – Was the Right Schumpeter Wrong.' Coauthored with Sverker Alänge, 1991. (See CV No. 91.)
- 62) 'Trender, problem- och forskningsområden rörande teknikens industriella förverkligande – speciellt Management of Technology.' Coauthored with Sören Sjölander. (CIM Working Paper 1989:04, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 63) 'Temporal Diffusion and Population Dynamics: A Systems Model.' Paper prepared for the IIASA symposium on Diffusion of Technologies and Social Behavior, IIASA, Laxenburg, Austria, June 14-16, 1989. Published in Nakicenovic, N. and Grübler, A. (eds.): *Rate Race Dynamics and Crazy Companies. The Diffusion of Technologies and Social Behavior*, Springer-Verlag, 1991, Ch. 10, pp. 247-263.
- 64) 'Is there an evolution of the art and science of technology management?' Paper prepared for a seminar on Innovation and the evolution of firms, Kiruna, Sweden, June 18-19, 1989, arranged by The Royal Swedish Academy of Engineering Sciences (IVA).
- 65) 'National Monopolies in Transition – Strategic Options for Telecommunications Administration with Illustrations from Sweden.' Coauthored with Erik Bohlin. Paper presented at the International Telecommunications Society, European Regional Meeting, Budapest, August 30, 1989.

- 65b) 'Strategic options for national monopolies in transition. The case of Swedish Telecom.' Coauthored with Erik Bohlin. Published in *Telecommunications Policy*, Vol. 15, No. 5, 1991, pp. 453-476.
- 66) 'Sammanfattning av intryck från en studieresa i Spanien, november 1989. Spaniens motor inom teknik och industri – EG?' ('Spain's engine within technology and industry – EC?') (CIM Working Paper 1989:11, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 67) 'FoU-strategier i svensk industri.' Coauthored with C. Oskarsson, N. Sjöberg and S. Sjölander. November 1989. Published in Agrell, Wilhelm (ed.): *Makten över forskningspolitiken*, Lund University Press. (CIM Working Paper 1989:10, Dept. of Industrial Management, Chalmers University of Technology.) (In Swedish.)
- 68) 'Business Strategies for Development/Acquisition of New Technologies. A comparison of Japan, Sweden and the US.' Coauthored with C. Oskarsson, N. Sjöberg and S. Sjölander. Paper presented at the conference on Technology and Investment, Stockholm, January 21-24, 1990, arranged by the Royal Swedish Academy of Engineering Sciences (IVA) in cooperation with OECD and The Swedish Ministry of Industry. Published in Deiaco, E., Hörnell, E. and Vickery, G. (eds.): *Technology and Investment*, Pinter Publishers, London, 1990. Ch. 4, pp. 64-92.
- 69) 'Investment Appraisals and Diffusion of New Communications Technology. The Case of Swedish Telecom.' Coauthored with E. Bohlin. Paper presented at the 8th International Conference of the International Telecommunications Society, Venice, March 18-21, 1990.
- 70) 'Internationalization and Diversification in Multi-Technology Corporations.' Coauthored with S. Sjölander. Paper presented at the symposium on Innovation in European Growth-Regions, Berlin, October 17-18, 1994. (Published in: Granstrand, Håkanson and Sjölander (1992) – CV 76.)
- 71) 'External Technology Acquisition in Large Multi-Technology Corporations.' Coauthored with Bohlin, E., Oskarsson, C. and Sjöberg, N. Paper presented at the conference on External Acquisition of Technological Knowledge, Kiel, Germany, July 8-10, 1991, arranged by Christian Albrechts University of Kiel and the R&D Research Unit, Manchester Business School. Published in *R&D Management*, Vol. 22, No. 2, 1992, pp. 111-133. (CIM Working Paper 1991:02, Dept. of Industrial Management, Chalmers University of Technology.)
- 72) 'Technology Management in 'Mul-Tech' Corporations.' Coauthored with C. Oskarsson. Paper presented at the Portland International Conference on Management of Engineering and Technology - PICMET, October 27-31, 1991. (CIM Working Paper 1991:01, Dept. of Industrial Management, Chalmers University of Technology.)
- 73) 'When are Technological Changes Disruptive? – A preliminary Analysis of Intervening Variables Between Technological and Economic Changes.' Coauthored with S. Jacobsson. Paper presented at the Marstrand Symposium on Economics of Technology, Marstrand, Sweden, August 18-22, 1991, organized by Chalmers University of Technology and IVA.
- 74) 'The Economics of Mul-Tech. A Study of Multi-Technology Corporations in Japan, Sweden and the US.' Paper presented at the International Conference on Changing Technology Issues and Trend of Policy Research, Seoul, Korea, October 30-31, 1991, arranged by Science and Technology Policy Institute at KAIST. Also presented at the Six-Country Conference, Stockholm, November 1991.

- 75) 'Hi-Tech Entrepreneurship in Silicon Valley. A critical appraisal.' Working paper, December 19, 1991. (CIM-Working Paper 1992:02, Dept. of Industrial Management, Chalmers University of Technology.)
- 76) 'Technology Management and International Business. Internationalization of R&D and Technology'. Co-edited with Håkanson, L. and Sjölander, S. John Wiley & Sons, London, 1992.
- 76b) 'Introduction and Overview'. Coauthored with Håkanson, L. and S. Sjölander. Published in Granstrand, Håkanson and Sjölander (eds.): *Technology Management and International Business. Internationalization of R&D and Technology*, John Wiley & Sons, 1992, Ch.1, pp.1-18. (CV 76)
- 76c) 'Internationalization and Diversification in Multi-Technology Corporations.' Coauthored with S. Sjölander. Paper presented at the conference on Technology Management and International Business, Stockholm, June 17-20, 1990, arranged by Chalmers University of Technology, Institute for Management of Innovation and Technology and the International Institute of Business. Published in Granstrand, O., Håkanson, L. and Sjölander, S. (eds.): *Technology Management and International Business. Internationalization of R&D and Technology*, John Wiley & Sons, 1992, Ch. 9, pp. 181-207. (CV 76)
- 77) 'Internationalization of R&D – A Survey of Some Recent Research.' Coauthored with Håkanson, L. and Sjölander, S. *Research Policy*, Vol. 22, No. 5-6, November 1993, pp. 413-430.
- 78) *Att leda företag i teknisk och ekonomisk omvandling*. Redaktör. Uppsatser från Holger Bohlin Symposium, 1991, Institutionen för Industriell organisation och ekonomi, Chalmers Tekniska Högskola, 1991. Published by Liber Ekonomi, 1992, titled: 'Så leder vi ...'. 304 pp. (In Swedish.)
- 79) 'Internationalization of Telcos – An Early Analysis of Behavior and Strategies.' Co-edited with Ola Johansson. Paper presented at the 7th Conference on European Communications Policy Research, EURO CPR '92, Sorö Storkro, Denmark, October 21-23, 1992. Published in proceedings published by IOS Press, Holland.
- 80) 'Patenting Profiles in Japanese and Swedish Large Corporations.' Sub study 2a in the overall project on 'Sweden's Position in the Global Technological Development.' Working paper 1992. (CIM Working Paper 1993:05, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 81) 'The Role of Patents in Technology Commercialization – Report from a questionnaire study.' Coauthored with Jon Sigurdson. Sub study 2b in the overall project on 'Sweden's Position in the Global Technological Development.' Working paper 1992.
- 82) 'Global Technological Development and Future Commercialization of Technologies.' Coauthored with Jon Sigurdson. Sub study 2c in the overall project on 'Sweden's Position in the Global Technological Development.' Working paper 1992.
- 83) 'The Evolution of New Mobile Communication Technologies and Corporate Patent Strategies.' Sub study 3 in the overall project on 'Sweden's Position in the Global Technological Development.' Working paper 1992.
- 84) 'Sweden's Position in the Global Technological Development.' (Summary Report.) Coauthored with Jon Sigurdson. Working paper 1992.

- 85) 'Managing Innovation in Multi-Technology Corporations.' In Dodgson, Mark and Rothwell, Roy (eds.): *Handbook of Industrial Innovation*, 1993, Ch. 30, pp. 367-383.
- 86) 'The Evolution of Nordic Mobile Telephony.' Paper presented at the International Telecommunications Society (ITS) European Conference, Stenungsbaden, Sweden, June 20-22, 1993. (CIM Working Paper 1993:06, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 87) 'Structure and Evolution of Economics of Technology as an Academic Field. A Bibliometric and Questionnaire Study.' Coauthored with Olle Persson. (CIM Working Paper 1993:08, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 88) *Economics of Technology*. (Editor), Elsevier North-Holland, Amsterdam, 1994. 518 pp.
- 88b) 'Economics of Technology – An Introduction and Overview of a Developing Field.' In Granstrand, O. (ed.): *Economics of Technology*, Elsevier, 1994, Ch. 1, pp. 1-36.
- 88c) 'Technological, Technical and Economic Dynamics – Towards a Systems Analysis Framework.' In Granstrand, O. (ed.): *Economics of Technology*, Elsevier, 1994, Ch. 7, pp. 189-221.
- 88d) 'Summary and Reflections upon Further Developments.' In Granstrand O. (ed.): *Economics of Technology*, Elsevier, 1994, Ch. 19, pp. 439-466.
- 89) 'The Race to European Eminence. Who are the coming Tele-Service Multinationals?'. Co- edited with Erik Bohlin, Elsevier North-Holland, Amsterdam, 1994. 572 pp.
- 89b) 'Introduction and Overview.' Coauthored with Erik Bohlin. In Granstrand, O. and Bohlin, E. (eds.): *The Race to European Eminence*, Elsevier, 1994, Ch. 1, pp. 1-22.
- 89c) 'Conclusions and Speculations.' In Granstrand, O. and Bohlin, E. (eds.): *The Race to European Eminence*, Elsevier, 1994, Ch. 32, pp. 523-541.
- 90) 'Internationalization of the Swedish Telecom Services Market.' Coauthored with Ola Johansson. In Granstrand, O. and Bohlin, E. (eds.): *The Race to European Eminence in Telecommunications*, Elsevier, 1994, Ch. 13, pp. 209-234.
- 91) 'The Evolution of Corporate Entrepreneurship in Swedish Industry - was Schumpeter wrong?' Coauthored with Sverker Alänge. In *Journal of Evolutionary Economics*, 1995, No. 5, pp. 133-156.
- 92) 'The 'Schnapps-glass Syndrome' in Swedish Industry – Diagnosis and Possible Cure.' Idea paper submitted to the Ruben Rausing Fund for Research on Entrepreneurship and Innovation.
- 93) 'Technology and Systems Competition in Mobile Communications.' Coauthored with Sven Lindmark. Paper presented at the Tenth International Conference of ITS, Sydney, July 3-6, 1994.
- 94) 'Technology Diversification in 'Mul-Tech' Corporations.' Coauthored with Christer Oskarsson. In *IEEE Transactions on Engineering Management*, Vol. 41, No. 4, November, 1994.

- 95) 'R&D and Corporate Internationalization.' In Cantwell, John (ed.): *Transnational Corporations and Innovative Activities*, Routledge, New York, 1994, Ch. 5. Also published in Cantwell, John (ed.): *Foreign Direct Investment and Technological Change*, Edward Elgar Publishing, London, 1998, Vol. 2, pp.13-40.
- 96) 'Industriell verksamhet och kunskapsbildning.' (Hyllningskrift till Albert Danielsson.) Bodin, M., Granstrand, O. and Guillet de Monthoux, P. (eds), Stockholm, 1995. (In Swedish.)
- 97) 'Därför Teknisk Ekonomi.' Published in Bodin et al. 1995, pp. 113-127. (CIM Working Paper 1993:04, Dept. of Industrial Management and Economics, Chalmers University of Technology.) (In Swedish.)
- 98) 'Forecasting Transitions in Technology Systems.' Coauthored with Sven Lindmark. Paper presented at the Six Countries workshop: Reinventing the Future, Stockholm, 1995.
- 99a) 'Strategisk Patentteknik (SPT).' Förslag till kompetenscentrum. January 1994. (In Swedish)
- 99b) 'Methodology of Combined Case Survey Studies.' Working paper, March 1995.
- 99c) 'Representing and Measuring of Technological Changes for Economic Analysis.' Working paper, March 1996.
- 100) 'Towards a Theory of the Technology Based Firm.' Paper presented at the EMOT workshop on Technology and the Theory of the Firm, University of Reading, U.K., May 1995. (See CV No. 108 for final journal version.)
- 101) 'Multi-Technology Corporations: Why They Have 'Distributed' Rather than 'Distinctive Core' Competencies.' Coauthored with Patel, P. and Pavitt, K. In *California Management Review*, Vol. 39, No. 4, 1997.
- 102) 'Some Economic Policy Options for Technology Procurement.' Paper presented for a conference on Technology Procurement, arranged by the Swedish Ministry of Industry, Stockholm, September 1996.
- 103) 'Internationalization, Diversification and Multitechnology Corporations.' Paper presented at the 22<sup>nd</sup> Annual Conference of the European International Business Academy (EIBA), Stockholm, December 1996, arranged by Institute of International Business, Stockholm School of Economics.
- 104) 'The Shift Towards Intellectual Capitalism – The Role of Infocom Technologies.' Paper presented at an international conference on Understanding Long-term Social System Shifts, Abisko, Sweden, May 1997, arranged by the Swedish Council for Planning and Coordination of Research (FRN). (See CV No. 115.)
- 105) 'Industrial Renewal in Sweden.' Paper prepared for the seminar *Why not in Sweden*, Stockholm, June 9-10, 1997, arranged by Ministry of Industry and National Swedish Center for Working Life.
- 106) 'Internationalization and Diversification of Corporate R&D. A study of Japanese and Swedish large Multitechnology Corporations.' Paper presented at a conference on Internationalization of Corporate R&D, arranged by CIRST, University of Montreal, Canada, August 1997.

- 107) 'Technological Systemic Changes and Economic Theories.' Published in Svedin, Uno and Odhnoff, Jan (eds.): *Swedish Council for Planning and Coordination of Research (FRN)*, Report 98:5, Stockholm, 1998.
- 108) 'Towards a Theory of the Technology Based Firm.' In *Research Policy*, 1998, Vol. 27, pp. 465-489.
- 109) 'Internationalization of corporate R&D: a study of Japanese and Swedish corporations.' In *Research Policy*, 1999, Vol. 28, No. 2-3, pp. 275-302.
- 110) 'Intellectual Capitalism – An Overview.' In *Nordic Journal of Political Economy*, 1999, Vol. 25, No. 2, pp. 115-127. Also published in Shri Bhagwan Dahiya and Virender Singh (eds.): *The Current State of Business Disciplines*, Spellbound Publications Pvt. Ltd, New Delhi, 2000.
- 111) *The Economics and Management of Intellectual Property – Towards Intellectual Capitalism*. Edward Elgar Publishing Ltd, Cheltenham, UK, 1999. (Paperback, 2000). 480 pp.
- 112) 'Corporate Management of Intellectual Property in Japan.' In *International Journal of Technology Management*, Vol. 19, No. 1/2, 2000, pp. 121-148. (Special issue with Edwin Mansfield as guest editor.)
- 113) 'The Growing Panda's Thumb – IPR Challenges under Intellectual Capitalism.' Paper presented at the conference "New Frontiers in the Economics of Innovation and New Technology", Torino, May 20-21, 2000 in honor of Paul David.
- 114) 'Corporate Innovation Systems. A Comparative Study of Multi-technology Corporations in Japan, Sweden and the USA.' Final report submitted to the EU Dynacom project, January 2000. 110 pp. (CIM Report 2000:01, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 115) 'The Shift Towards Intellectual Capitalism – The Role of Infocom Technologies.' In *Research Policy*, Vol. 29, No. 9, December 2000, pp. 1061-1080.
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- 117) 'Intellectual Capitalism – its Causes and Consequences.' Paper prepared for the 2<sup>nd</sup> international conference on Technology Policy and Innovation, Lisbon, Portugal, August 3-5, 1998.
- 118) 'Strategic Management of Intellectual Property.', Paper presented at the Portland International Conference on Management of Engineering and Technology (PICMET), July 25-29, 1999. (CIM Working Paper 1999:01, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 119) 'Reflections on the Cultural Foundations of IPRs.' Paper presented at the International conference on Technological Policy and Innovation, Paris, November 20-22, 2000. (CIM Working Paper 2000:01, Dept. of Industrial Management and Economics, Chalmers University of Technology.)

- 120) 'Strategic Dimensions of Intellectual Property Rights in the context of Science and Technology Policy.' Prepared by an independent ETAN Expert Working Group for the European Commission. Member of EC-expert group preparing the report. Brussels, 1999. Final Report, June 1999. (EUR 18914.)
- 121) 'Does the present IPR system inhibit or encourage innovation – the case of blocking patents.' Working paper submitted as supporting paper to an EC-expert group, 2000.
- 122) 'The Pro-patent Era.' Working paper submitted as supporting paper to an EC-expert group, 2000.
- 123) 'Role and Strategic Use of IPR in International Research Collaborations – Some key issues and problems.' Memo submitted to an EC-expert group/DG12, October 3, 2000.
- 124) 'Role and Strategic Use of IPR in International Research Collaborations – The case of telecom.' Working paper submitted to an EC-expert group/DG12, December 13, 2000. (Background paper to CV No. 131.)
- 125) 'A note on open source models for R&D collaborations.' Working paper contributed to the STRATA-ETAN meeting: Role and Strategic use of IPR in International Research Collaborations, February 19, 2001. (Background paper to CV No. 131.)
- 126) 'IPR (Intellectual Property Rights) Aspects of Internet Collaborations.' Prepared by the Rapporteur Ove Granstrand in conjunction with workshop co-chairmen Dominique Foray and Paul David and a group of independent experts for the European Commission, Final Report, March 2001, Research Directorate General, Brussels. (EUR 19456.)
- 127) 'Research at Chalmers on diversification – A summary.' December 12, 2001.
- 128) 'A note on Corporate Innovation Systems.' Paper presented at TIK-seminar, Rosendahl, Norway, June 8-11, 2001.
- 129) 'The Economics and Management of Evolutionary Knowledge Diversification.' Paper prepared for the Druid's Nelson/Winter Conference, Aalborg, Denmark, June 12-15, 2001.
- 130) 'From R&D/Technology Management to Strategic IP/IC Management.' Paper presented at the AEA Conference Innovations and Intellectual Property, Solvay Business School, Brussels, November 22-23, 2001. (See CV No. 140c.)
- 131) 'Role and Strategic Use of Intellectual Property Rights in International Research Collaborations.' Final report, April 3, 2002, Ove Granstrand, as member of an independent Expert Working Group with John Adams (Chairman) and Hugh Cameron (Rapporteur), for the European Commission Research Directorate General. (EUR 20230.)
- 132) 'The Future University and the University Future? – An agenda for management studies in the university industry.' Paper presented at the International LES Conference, Osaka, Japan, April 8, 2002. (CIM Working Paper 2002:01, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 133) 'Some Composite Policy Measures for Technology Procurement, Joint Ventures and IPRs.' Working paper submitted as supporting paper to the EU/DG Research expert group on improving the effectiveness of direct public support measures to stimulate private investment in research, September 15, 2002. (Background paper to CV No. 136.)

- 134) 'Towards more effective R&D for Europe.' Working paper prepared for the EU/DG Research workshop on IPR and Technology Transfer, November 1, 2002.
- 135) 'Technology Collaborations in Corporate Innovation Systems.' Coauthored with Sven Lindmark. Final report submitted to Vinnova, December 2002, 121 pp. (CIM Report 2002:01, Dept. of Industrial Management and Economics, Chalmers University of Technology.)
- 136) 'Raising EU R&D Intensity – Improving the Effectiveness of Public support Mechanism for Private Sector research and Development: Direct Measures' Report to the European Commission from an Independent Expert Group, 2003. (EUR 20716.)
- 137) 'Strategic Use and Adaptation of Intellectual Property Rights Systems in Information and Communications Technologies-based Research.' Expert Group Report, European Commission, 2003. (EUR 20734 EN.)
- 138) *Economics, Law and Intellectual Property*. (Editor), Kluwer Academic Publishers, Dordrecht, 2003. 568 pp.
- 138b) 'Innovations and Intellectual Property Studies. An introduction and overview of a developing field.' In Granstrand, O. (ed.): *Economics, Law and Intellectual Property*, Kluwer, 2003, Ch. 1, pp. 9-40.
- 138c) 'Are we on our way in the new economy with optimal inventive steps?' In Granstrand, O. (ed.): *Economics, Law and Intellectual Property*, Kluwer, 2003, Ch. 10, pp. 223-258.
- 138d) 'Summary and reflections upon further developments.' In Granstrand, O. (ed.): *Economics, Law and Intellectual Property*, Kluwer, 2003, Ch. 21, pp. 519-562.
- 139) 'The Economics and Management of Technological Diversification'. Co-edited with Cantwell, J. and Gambardella, A., Routledge, London, 2004.
- 139b) 'Technological and Business Diversification – A survey of theories and empirical evidence.' Co-authored with Torrisi, S., *The Economics and Management of Technological Diversification*, Routledge, London, 2004, Ch. 2, pp. 21-68.
- 139c) 'Multi-technology Management.' *The Economics and Management of Technological Diversification*, Routledge, London, 2004, Ch. 11, pp. 297-332.
- 140) 'Bringing Technology and Innovation into the Boardroom. Strategy, Innovation and Competences for Business Value'. Co-edited with European Institute of Technology and Innovation Management (EITIM), Palgrave Publ., 2004.
- 140b) 'Multi-Technology Management: The Economics and Management of Technology Diversification.' In Granstrand, O. (ed.): *Bringing Technology and Innovation into the Boardroom*, Palgrave Publ., 2004, Ch. 7, pp. 133-163.
- 140c) 'From R&D/Technology Management to IP/IC Management.' In Granstrand, O. (ed.): *Bringing Technology and Innovation into the Boardroom*, Palgrave Publ., 2004, Ch. 9, pp. 190-219.
- 141) 'The Economics and Management of Technology Trade – towards a pro-licensing era?' In *International Journal of Technology Management*, Vol. 27, Nos. 2/3, 2004, pp. 209-240.



- 142) 'The Scientometric World of Keith Pavitt.' Co-authored with Meyer, M., Pereira, T.S., and Persson, O. Paper presented at the Conference in honor of Keith Pavitt, Science Policy Research Unit, UK, November 2003. *Research Policy* 33 (2004), pp. 1405-1417.
- 143) 'Innovation and Intellectual Property Rights.' In Fagerberg, J., Mowery, D., and Nelson, R. (eds.): *Oxford Handbook of Innovation*, Oxford University Press, Ch. 10. (2005.)
- 144) 'Intellectual property rights for governance in and of innovation systems.' In Birgitte Andersen, Editor: *Intellectual Property Rights: Innovation, Governance and the Institutional Environment*, Edward Elgar Publishing, 2006, Ch.10, pp. 311–343.
- 145) 'Patents and Intellectual Property: A General Framework'. Published as Chapter 1 in Cantwell, J. (ed.) *The Economics of Patents*. Edward Elgar Publ., Cheltenham, UK, 2006. Vol. I, pp. 3-59.
- 146) 'Fair and Reasonable Royalty Rate Determination - When is the 25% rule applicable?', *LES Nouvelles*, September 2006, Vol. XLI, No. 3, pp. 179-181.
- 147) 'SOU 2006:80. Patent och innovationer för tillväxt och välfärd.' Näringsdepartementet, Stockholm. Fritze, 2006 (458pp.).
- 148) 'Proper property properties of knowledge'. Paper presented at the international IPR conference on "Intellectual Property Rights for Business and Society", Birkbeck College, London, September 13-14, 2006.
- 149) 'Intellectual property rights for governance of science in university innovation systems – a costly threat to openness and freedom?' Paper presented at the workshop "Scientific Knowledge as Property", June 3, 2006, arranged by European University Institute, Robert Schuman Centre for Advanced Studies
- 150) 'Some IP Management Issues in Open Co-innovation.' Paper presented at the EITIM 3rd Annual Senior Management Forum "Partnering in Innovation" & "The Role of CTO", Nice, January 15–16, 2007.
- 151) 'Economists on Technology – Scenes from a Summit.' Illustrations from the Wallenberg Symposium on Economics of Technology (Marstrand, Sweden. August, 1991). Svenska Kulturkompaniet, Gothenburg, Sweden, 2007.
- 152) 'Patents, Entrepreneurship and Economic Growth – IP Policy Issues for Sweden and Europe', Paper presented at the SNEE Conference on "European Integration in Swedish Economic Research", Mölle, Sweden, May 22–25, 2007.
- 153) 'Creativity and IP in Arts and Sciences – Some economic puzzles and paradoxes.' Paper prepared for the International DIME Conference "The Creative Industries and Intellectual Property" London, 22–23 May, 2008.
- 154) 'Patentens roll för den (svenska) industriella utvecklingen – några exempel.' (In Swedish). Chapter contribution to *Likt unikt: innovation, kreativitet och plagiat*, (Eds): Per Jonas Nordell, Lars Paulsson, National Museum of Science and Technology, Stockholm, 2008. pp. 109–128.
- 155) 'Where Should We Use IPRs in Europe?– The Issue of Patentable Subject Matter in the Promotion of Science, Technology and Useful Arts.' Paper presented at the 10th annual

- SNEE Conference “European Integration in Swedish Economic Research”, Mölle, Sweden, May 20–23, 2008.
- 156) ‘Towards Greater Integration of IP Policies and Institutions in the European Research and Innovation Area’, Paper presented at the 11th annual SNEE Conference “European Integration in Swedish Economic Research”, Mölle, Sweden, May 26-29, 2009.
  - 157) ‘Vad IUI har betytt för mig’. In Magnus Henrekson (ed): *IFN/IUI 1939-2009. Sju decennier av forskning om ett näringsliv i utveckling*. Stockholm: Ekerlids, 2009. (In Swedish.)
  - 158) ‘Patents and policies for innovations and entrepreneurship.’ In Takenaka, T. and Moufang R. (eds): *Patent Law and Theory – A Handbook of Contemporary Research*, Edward Elgar Publishing, 2009, pp. 66-100.
  - 159) ‘The economics of IP in the context of a shifting innovation paradigm’. Contribution to the WIPO Innovation Report 2011 “Shifting Innovation Paradigms and the Role of Intellectual Property”, May 2011. CIM Working Paper No. 2011:01.
  - 160) ‘The Economics and Management of New Sustainable Technologies - Was Coase About Right About Rights?’ Paper presented at the R&D Management Conference, Norrköping, June 28-30, 2011.
  - 161) ‘From Environmental Protection towards Sustainable Innovation Management - Incentives and Governance Structures.’ Co-authored with Holgersson, M. Paper presented at the R&D Management Conference, Norrköping, June 28-30, 2011.
  - 162) ‘Innovation and Intellectual Property Cases. Cases in Management, Economics, Law and Technology’ (1st ed.). Co-edited with Holgersson, M. Chalmers University of Technology, Göteborg, Sweden, 2011.
  - 163) ‘Intellectual property and licensing strategies in open collaborative innovation.’ Co-authored with Bogers, M, and Bekkers, R. Published as Ch. 3 in de Pablos Hevederos, C and López Berzosa, D. (eds): *Open Innovation in Firms and Public Administrations: Technologies for Value Creation*. Published by IGI Global, Hershey, USA, 2012.
  - 164) ‘The anatomy of rise and fall of patenting and propensity to patent: The case of Sweden.’ Co- authored with Holgersson, M. In *International Journal of Intellectual Property Management*, Vol. 5, No. 2, pp. 169-198, 2012.
  - 165) ‘The dynamics of multi-layered openness in innovation systems: The role of distributed knowledge and intellectual property.’ Co-authored with Bogers, M., and Holgersson, M. Presented at the R&D Management Conference, Grenoble, France, May 23-25, 2012
  - 166) ‘The 25% rule revisited and a new investment-based method for determining FRAND licensing royalties.’ Co-authored with Holgersson, M. In *LES Nouvelles*, Vol. 47, No. 3, pp. 188-195, 2012.

- 167) 'Managing the Intellectual Property Disassembly Problem.' Co-authored with Holgersson, M. In *California Management Review*, Vol. 55, No. 4, 2013.
- 168) 'Valuation and Value Sharing of Structured Portfolios with Complementary and Substitute Assets.' CIM Working paper 2014:1. Chalmers University of Technology.
- 169) 'Multinational technology and intellectual property management – Is there global convergence and/or specialization?' Co-authored with Holgersson, M. In *International Journal of Technology Management*, Vol. 64, Nos. 2/3/4, 2014.
- 170) 'The Challenge of closing open innovation: The intellectual property disassembly problem.' Co-authored with Holgersson, M. In *Research-Technology Management*, Vol. 57, No. 5, pp. 19-25, 2014.
- 171) 'IP strategies and policies for and against evergreening.' Co-authored with Tietze, F. CIM Working paper 2014: 4.
- 172) 'Innovation and Patent Policies for Improving Linked Innovation Systems – The Case of Sweden with an Outlook on Europe.' Paper presented at the 9th annual EPIP conference "Improving Innovation Systems", Brussels, Belgium, September 4-5, 2014.
- 173) 'Intellectual Property.' Co-authored with Holgersson, M. Published in *The Wiley-Blackwell Encyclopedia of Consumption and Consumer Studies*, 2015.
- 174) 'History of Patenting and IP Management.' In *Entreprises et histoire*, No. 82, pp. 103-123, 2016.
- 175) 'Det finns (ännu) inga patentröslösningar i innovationspolitiken. Eller?' In McKelvey, M., and Zaring, O. (eds): *Sveriges entreprenöriella ekosystem – Företag, akademi, politik*, ESBRI, Stockholm, Sweden, 2016, Chapter 19, pp. 280-301.
- 176) 'IP strategies for evergreening of sequential innovations.' Co-authored with Tietze, F. Paper presented at R&D Management Conference "From Science to Society: Innovation and Value Creation", Cambridge, UK 3-6 July, 2016.
- 177) 'The importance of patents for innovation appropriation and open financing – a new view.' Co-authored with Holgersson, M. Paper presented at R&D Management Conference "From Science to Society: Innovation and Value Creation", Cambridge, UK 3-6 July, 2016.
- 178) 'Patenting motives, technology strategies, and open innovation.' Co-authored with Holgersson, M. In *Management Decision*, Vol. 55, No. 6, 2017.
- 179) 'The evolution of intellectual property management in innovation ecosystems: Uncovering complementary and substitute appropriability regimes' Co-authored with Holgersson, M., and Bogers, M. In *Long Range Planning*, Vol. 51, No. 2, 2018.
- 180) 'IP-strategi i digitaliserande industrier' Co-authored with Holgersson, M. In *Management of Innovation & Technology*, No. 2, 2018.
- 181) 'Industrial Innovation Economics and Intellectual Property' (7<sup>th</sup> rev. ed.), Published by Svenska Kulturkompaniet, Gothenburg, Sweden, 2018 (458 pp.).
- 182) 'Innovationer och IP för tillväxt och välfärd'. In *Management of Innovation & Technology*, No. 4, 2018.

- 183) 'Evolving Properties of Intellectual Capitalism: Patents and Innovations for Growth and Welfare.' Edward Elgar Publ., Cheltenham, UK, 2018 (520 pp.).
- 184) 'Patents and policies for innovations and entrepreneurship.' In Takenaka, T. (eds): *Patent Law and Theory – A Handbook of Contemporary Research* (2<sup>nd</sup> ed.), Edward Elgar Publishing, (Forthcoming).

### **3. Major past and present research activities**

#### **Ongoing**

- 1) Intellectual property management in digitalizing businesses. The purpose of this research project is to explore and explain the role of IPM for various business strategies in order to create sustainable innovativeness and competitiveness in Swedish companies in connection to digitalization. The project will run over two years, from late 2016 to late 2018. Leading experimental research sub-project. Funded by Vinnova.
- 2) Intellectual assets, innovation, growth and value creation and the role of new digital technologies and digital property (ITIP). Project aims to increase our managerial, economic, legal and technological (MELT) knowledge about a) the theoretical and empirical relations between the 5 key factors: R&D, intellectual assets (IAs), innovations, growth and societal value creation. b) how digital technologies interact with these relations. The project will run over two years, from early 2018 to late 2019. Research program leader. Funded by Vinnova. Examples of projects in the program portfolio are:
  - a) R&D, IP, innovations, growth and social value creation – an international statistical analysis.
  - b) Valuation and value sharing of multiple IPRs and IAs and the consequences for R&D strategies.
  - c) Modelling of IAs, innovations and endogenous recombinant economic growth.
  - d) Patent information analysis.
  - e) Role and design of IPRs for data based industries.
  - f) Development of FRAND based licensing and pricing on IA / IP markets

#### **Completed**

- 1) ‘Economics, law and management of intellectual property/capital.’ Research program for Centre for Intellectual Property Studies (CIP). Started 1999, completed in 2008 Research program leader. Funded by a.o. Vinnova, PRV, EPO (European Patent Office), LE Lundberg Foundation, SHB Foundation, TBS and industry. Examples of projects in the program portfolio were:
  - a) Valuation of IP and intellectual capital (in collaboration with Bo Heiden).
  - b) Technology collaborations across corporate innovation systems (in collaboration with Sven Lindmark).
  - c) The university future and the future university.
  - d) Patentability requirements. An international comparative study.
  - e) IP-strategies in procurement and exploitation of new technologies, especially licensing strategies.
- 2) Patents and innovation for growth and welfare (PEX). Started 2004, completed in 2017. Research special investigator for the Swedish Government. Presented in December 2006 (“Patent and innovations for growth and welfare” SOU 2006:80). The project was focused on developing new ways for imparting knowledge and insight about the economic benefits and costs of patenting.
- 2) ‘Economics and management of technology’. Ten-year research program, started 1989. Research program leader. Examples of projects in the program portfolio were:
  - a) Techno-economic management of investments in telecommunication networks (in collaboration with Erik Bohlin)
  - b) Sweden’s technological system and future competitiveness (in collaboration with Staffan Jacobsson)
  - c) Economics and management of technology in MTCs (in collaboration with Sören Sjölander)

- d) Internationalization and diversification of telecom service providers (in collaboration with a.o. Ola Johansson)
  - e) The revolution of mobile communications (in collaboration with Sven Lindmark)
- 3) 'Technology & strategies in large companies. A study of corporate development and entrepreneurship.' Five-year research program sponsored by STU. Research program leader. Completed in 1991.
- 4) Role of Intellectual Property Rights for Sustainable Environmental Technology Management. 2010-2013.
- 5) Innovation and IP strategies for growth and value creation in medicine and technology. 2008-2013. Funded by the Swedish Handelsbank Research Foundation.
- 6) Management, Economics and IP Strategies in Innovation and Business Development Processes (the MELT-project). 2008-2013. Research program leader. Funded by Vinnova and industry. Projects are (ODI=Open, Distributed Innovation):
- a) General Framework, models and tools for ODI-management
  - b) Knowledge, learning and IP-sharing in ODI-collaborations
  - c) Generalizability of open source type of technological collaborations
  - d) Technology and patent exploitation strategies
  - e) Distributed innovations, employee mobility and intellectual property
  - f) Joint analysis of patent information and publication information analysis
  - g) Managing ODI in SMFs

#### **IV. KEYNOTE SPEECHES AND PRESENTATIONS**

##### **1. Major conferences and symposia organized and chaired (resulting in published conference books)**

The Wallenberg Symposium on 'Medicine, Technology and Economics – Seeking strategies for research and teaching in converging fields.', Stockholm, October 23–26, 2007.

The First International CIP Forum: 'Intellectual Property Strategies and New Technologies.', Gothenburg, June 17–19, 2001.

The First International CIP Symposium on 'Economics and Law of Intellectual Property–Seeking strategies for research and teaching in a developing field.', Gothenburg, June 26–30, 2000.

The International Telecommunication Society Conference on 'The Race to European Eminence – Who will be the Multinational Telecommunications Carriers in the Future Europe?.', Stenungsund, Sweden, June 20–23, 1993.

The Wallenberg Symposium on 'Economics of Technology – Seeking strategies for research and teaching in a developing field.', Marstrand, Sweden, August 18–22, 1991.

The IMIT International Research Conference on 'Technology Management and International Business.', Stockholm, June 17-20, 1990.

TIPCE-conference series 1981-84. 'Technology and Industrial Policy in China and Europe'. A series of conferences 1981-1984 in Sweden, England and China. Co-organized with Science Policy Research Unit (UK) and Research Policy Institute (RPI).

##### **2. Keynote speeches and conference presentations 1999/2000-2018**

- Pr1 'Strategic Management of Intellectual Property.', Paper presented at the Portland International Conference on Management of Engineering and Technology (PICMET), July 25-29, 1999.
- Pr2 'Building Intellectual Capital Through Total IP Strategies', Keynote speech at 'Patentforum', Stockholm, November 22, 1999.
- Pr3 Danish IP Roundtable, PVS, Copenhagen, January 30, 2000.
- Pr4 'Patent Strategies and Technology Management.' Teknikbrostiftelsen, Göteborg, April 5, 2000.
- Pr5 'Innovations in the New Economy.' NUTEK-Seminar, Stockholm, April 11, 2000.
- Pr6 'Patent Valuation', Keynote speech at 'Patentdagen', IVA, Stockholm, April 12, 2000.
- Pr7 'IPR as an Element in Strategic Management in Multinational Companies.' Keynote speech at Patent- og Varemaerkesstyrelsen, Copenhagen, May 3, 2000.
- Pr8 'Meaning and Usefulness of Intellectual Capital Concepts and Approaches.' Presentation at the 2nd Innovation Network Meeting, Oslo, May 26, 2000.
- Pr9 'IP Management and Technology Trade.' Teknikbrostiftelsen, June 7, 2000.
- Pr10 'The Growing Panda's Thumb, IPR- Challenges under Intellectual Capitalism.' Paper presented at a Conference in honour of Paul David, Turin, Italy, May 20-21, 2000.

- Pr11 'Towards Intellectual Capitalism - its Nature, Causes and Consequences.' Lecture at The Holger Crafoord Memorial Symposium 'The New Economics of Knowledge', Institute of Economics Research, Lund University, Lund, Sept 7-8, 2000.
- Pr12 'IPR as an Element in Strategic Management.' Presentation at Novo Nordisk Patent Seminar, Copenhagen, September 18-19, 2000.
- Pr13 'Towards Intellectual Capitalism: Owning your ideas - the strategic use of IPR.' Presentation at the Intellectual Property Holding A/S seminar on 'Who Owns the New Economy', Ideon, Lund, October 5, 2000.
- Pr14 'Reflections on the Cultural Foundations of IPRs.' Presentation at the International conference on Technological Policy and Innovation: Economic and historical perspectives, organized by CNRS, OED, CREST-NBER and Commissariat Général du Plan, Paris, November 20-22, 2000.
- Pr15 'Så bygger du upp företagets intellektuella kapital genom totala IP-strategier.' Patentforum 2000, Institute for International Research, Stockholm, December 11-12, 2000. (In Swedish)
- Pr16 'A Note on Corporate Innovation Systems.' Paper presented at TIK-seminar, Rosendahl, Norway, June 8-11, 2001.
- Pr17 'The Economics and Management of Evolutionary Knowledge Diversification.' Paper presented for the DRUID-conference, Aalborg, Denmark, June 12-15, 2001.
- Pr18 'Intellectual Capitalism and IP Rights.' Presentation at the LES Scandinavia Conference, Malmö, Sweden, September 4, 2001.
- Pr19 'Patent Strategies in Europe, US and Japan.' IIR Conference, Stockholm, September 12, 2001.
- Pr20 'IPR as a Strategic Management Tool', NKT's IPR Conference, Copenhagen, September 18, 2001.
- Pr21 'Linking Intellectual Property Strategies to Innovation Management.' Technology Management Innovation Forum, Cambridge University, September 20, 2001.
- Pr22 'From R&D/Technology Management to Strategic IP/IC Management.' Keynote presentation at the Econometric Association Conference 'Innovations and Intellectual Property', Solvay Business School, Brussels, November 22-23, 2001.
- Pr23 'Patent Valuation.' Onsager Seminar, Oslo, November 29, 2001.
- Pr24 'Patents and Value Creating Strategies.' EKA Chemical Patent Day, Kungälv, Sweden, December 13, 2001.
- Pr25 'The Future University and the University Future.' Presentation at the International LES Conference, Osaka, Japan, April 8, 2002.
- Pr26 'Competitive Institutions and Organisation in the Knowledge Society – S&T Governance under Intellectual Capitalism and Beyond.' Conference on 'Policies, Institutions and Citizens in the Knowledge Society', Spanish Presidency of the European Union Council and the European Commission, Barcelona, May 6-7, 2002.



- Pr27 'Economics and Management of Intellectual Property.' Presentation at University of Quebec, Montreal, Canada, May 15-16, 2002.
- Pr28 'IP policyfrågor och strategier vs företagets ekonomiska prestationer.' Presentation at Brann's seminar 'IP-strategier i företagets vardag', Stockholm, June 12-13, 2002. (In Swedish)
- Pr29 'Affärshemligheter är lika viktiga som legalt beviljade ensamrätter.' Presentation at Brann's seminar 'IP-strategier i företagets vardag', Stockholm, June 12-13, 2002. (In Swedish).
- Pr30 'Interdisciplinary body movements - some ideas for bibliometrics in knowledge management.' Paper presented at the Seventh Nordic Bibliometric Workshop, Oslo, October 10-11, 2002.
- Pr31 'Innovation and Intellectual Property.' Paper presented at a conference within the EU project 'Understanding Innovation', Lisbon, Portugal, November 11, 2002.
- Pr32 'Intellectual Property Rights from an Economic Perspective.' Presentation at the conference on 'A New Framework for Intellectual Property Rights', organized by the Max-Planck-Institute, Munich, November 21-23, 2002.
- Pr33 'Integrating Business Strategies and IPR Portfolio Strategies.' Presentation at the PVS/Confex conference 'Patentstrategier', Copenhagen, November 26, 2002.
- Pr34 'Economics, Management, and Law of Intellectual Property - Interdisciplinary Approaches to IP Strategies.' Presentation at the 'DKPTO/CBS Lecture on Intellectual Property Strategy 2002/2003', Copenhagen Business School, May 12, 2003.
- Pr35 'Innovation and Intellectual Property.' Presentation at the DRUID Summer Conference 2003 on Creating, Sharing and transferring Knowledge – The role of Geography, Institutions and Organizations.' Copenhagen, June 12-14, 2003.
- Pr36 'Global IPR Trends.' Presentation at the Zacco Board Strategy Meeting, Copenhagen, August 20, 2003.
- Pr37 'Intellectual Property - How it can transform your business.' Presentation at the Chalmers Executive Seminar 'Intellectual Capitalism and Business Transformation', Gothenburg, September 25, 2003.
- Pr38 'Building a Licensing Organization.' Presentation at CIP Forum 2003, 'Managing the Intellectual Value Chain', Gothenburg, October 5-6, 2003.
- Pr39 'Strategic Management of Technology Collaboration.' Presentation at CIP Forum 2003, 'Managing the Intellectual Value Chain', Gothenburg, October 5-6, 2003.
- Pr40 'From R&D/Technology Management to IP/IC Management.' Presentation at the Strategic Management Society 23rd annual International Conference, Maryland, U.S., November 9-12, 2003.
- Pr41 'The Economics and Management of Technological Diversification' Presentation at "What Do We Know About Innovation?" A conference in honour of Keith Pavitt, Brighton, U.K, November 13-15, 2003.
- Pr42 'Patenting Policies.' Presentation for an Irish government commission, Dublin, February 5, 2004.

- Pr43 'IP/IC Economics and Strategy.' Lecture at Helsinki University of Technology, Helsinki, February 27, 2004.
- Pr44 'Value Creation through Research Collaboration and Networks', Presentation to the Workshop on "Performance Assessment of Public Research, Technology and Development (RTD) Programmes" organised by the European Commission in co-operation with the Washington Research Evaluation Network, Brussels, June 17-18, 2004.
- Pr45 'The Business and Development of Intellectual Property and Intellectual Capital in a Global Perspective.' Lecture at A&P Arnason and LOGOS legal services, Reykjavik, Iceland, November 19, 2004
- Pr46 'Economics, Law and Intellectual Property - Some current research issues.' Lecture at Eindhoven Centre for Innovation Studies (Ecis), Eindhoven, the Netherlands, December 8, 2004.
- Pr47 'Corporate strategies for technology-based growth.' Lecture at EITIM Senior Management Forum, Nice, France, January 17-19, 2005.
- Pr48 'Linking business strategies to IP strategies.' Lecture at EITIM Senior Management Forum, Nice, France, January 17-19, 2005.
- Pr49 'The Role of Patenting and IP for Economic Growth.' Opening Speech at the XXI Nordic Congress for Intellectual Property Agents – Conopa 2005, Kirkenes/Trondheim, Norway, September 7-11, 2005.
- Pr50 'Evolution of economic institutions - The case of patent offices.' Presentation prepared for the conference on "The role of national intellectual property policy between regional dominance and international governance – the European perspective" Florence, Italy, September 23-24, 2005.
- Pr51 'Counterfactual Analysis (CFA) and Methodology.' Seminar presentation at Chalmers University of Technology, Gothenburg, November 8, 2005.
- Pr52 'IP regimes related to open innovation.' Presentation at EITIM Forum, Nice, France, January 16, 2006.
- Pr53 'Adapting patent policies and procedures for the era of intellectual capitalism.' Presentation at Stanford University, March 8, 2006.
- Pr54 'Intellectual Asset Management - Technology Strategies and Transactions.' Presentation at the Workshop in Technology Management for Technologists in Enterprise Ireland, Dublin, May 8, 2006, arranged by National Institute of Technology Management, Ireland.
- Pr55 'Balancing patents with economic development.' Presentation at the World Congress of Fédération Internationale des Conseils en Propriété Industrielle, Paris, May 23, 2006.
- Pr56 'Intellectual Asset Management - Managing Intellectual Property.' Presentation at the Workshop in Technology Management for Technologists in Enterprise Ireland, Dublin, May 29, 2006, arranged by National Institute of Technology Management, Ireland.

- Pr57 'Intellectual property rights for governance of science in university innovation systems – a costly threat to openness and freedom?' Presentation at the workshop "Scientific Knowledge as Property", Florence, Italy, June 3, 2006, arranged by European University Institute, Robert Schuman Centre for Advanced Studies.
- Pr58 'Economic Value of IPR for Business in the Internal Market..' Presentation at Finland's EU Presidency Conference "IPR at the Crossroads – Evaluation, Regulation and Enforcement in the European Union", Helsinki, 6–8 September, 2006.
- Pr59 'Proper Property Properties of Knowledge'. Paper presented at the international IPR conference on "Intellectual Property Rights for Business and Society" Birkbeck College, London, 13–14 September, 2006.
- Pr60 'Some Management Issues in Technology Collaboration.' Presentation at the EITIM 3rd Annual Senior Management Forum "Partnering in Innovation" & "The Role of CTO", Nice, France, January 15-16, 2007.
- Pr61 'Economics of the IP and its Strategic Implications'. Lecture at the IP Academy, Stockholm, February 13, 2007.
- Pr62 'Patents, Entrepreneurship and Economic Growth – IP Policy Issues for Sweden and Europe', Paper presented at the SNEE Conference on "European Integration in Swedish Economic Research", Mölle, Sweden, May 22–25, 2007.
- Pr63 'Innovationer och entreprenörskap för Sveriges tillväxt och konkurrenskraft – Några reflektioner och frågeställningar', "ITPS seminarium om systembeskrivningar med bäring på tillväxt" Stockholm, May 29, 2007.
- Pr64 'Patents and Innovations for macro- and micro-economic growth'. Presentation for the Chinese Academy of Sciences, Chalmers University of Technology, Gothenburg, June 15, 2007.
- Pr65 'Presentation for the Budapest Dialogue – Intellectual Property, Creative Economies and Their Consumers', Budapest, September 6-8, 2007.
- Pr66 'The Changing Innovation Opportunities and Challenges in a New IPR Regime', Keynote speech at the 8th International CINet Conference "Continuous Innovation – Opportunities and Challenges", Chalmers University of Technology, Gothenburg, September 10, 2007.
- Pr67 'Patents and Innovations for Growth and Welfare – IP Policies for Europe', Plenary presentation at the 2nd EPIP (European Policy for Intellectual Property) Conference, Lund, Sweden, September 20-21, 2007.
- Pr68 'The Role of Intellectual Property Rights in Biomedical Innovation', Presentation at the ESF-IfW International Research Conference "The Global Organization of Biomedical Innovation: Funding, Intellectual Property Rights, Incentives, and the Diffusion of New Technology", Kiel, Germany, October 4-8, 2007.
- Pr69 'Bringing Technology into the Boardroom and IP and Litigation into the R&D Lab.' Presentation at CHAMPS/IMOT, October 12, 2007.
- Pr70 'The Patent System and its Role 2007 and 2027 – A Global Future Outlook', Presentation at the Forum for Innovation Management, Stockholm, October 17, 2007.

- Pr71 ‘The Medicine, Technology and Economics Convergence Agenda – Fostering Field Fusion’. Presentation at The Wallenberg Symposium on Medicine, Technology and Economics – seeking strategies for research and teaching in converging fields, Stockholm, October 25, 2007.
- Pr72 ‘The Changing Roles of IPRs in Bio-Health Technologies’. Presentation at The Wallenberg Symposium on Medicine, Technology and Economics – seeking strategies for research and teaching in converging fields, Stockholm, October 26, 2007.
- Pr73 ‘Prizes and Patents as RDID Incentives in Medicine and Technology’, Presentation at the KEI & UNU-MERIT, Maastricht Workshop on Medical Innovation Prizes, Maastricht, the Netherlands, January 28 – 29, 2008.
- Pr74 ‘Economics of Innovation and IP’, Presentation at Stellenbosch University, Stellenbosch, South Africa, March 2008.
- Pr75 ‘Patents and Innovations for Growth and Welfare – IP Policies for Europe’, Presentation at University of Cape Town, Cape Town, South Africa, March 2008.
- Pr76 ‘Economics of IP, Open Innovation and its Strategic Implications’, Presentation at the IP Academy, Stockholm, May 26, 2008.
- Pr77 ‘Patents and Innovations for Growth and Welfare.’ Seminar at KTH Executive School, Stockholm, May 27, 2008.
- Pr78 ‘Where Should We Use IPRs in Europe? The Issue of Patentable Subject Matter in the Promotion of Science, Technology and Useful Arts’, Presentation at the 10th annual SNEE Conference “European Integration in Swedish Economic Research”, Mölle, Sweden, May 20–23, 2008.
- Pr79 ‘Creativity and IP in Arts and Sciences – Some economic puzzles and paradoxes’, Presentation at the International DIME Conference, “The Creative Industries and Intellectual Property”, London, May 22–23, 2008.
- Pr80 ‘Innovation and IP Strategies for Technology and Business Development’, Presentation at the 4th Annual EITIM Senior Management Forum, Nice, June 2-3, 2008, arranged by EITIM – European Institute of Technology and Innovation Management.
- Pr81 ‘Current Economic, Legal and Technological Changes’. Presentation at the International Centennial Conference on “The role of the IP-system in society – today and the future”, Stockholm, August 27, 2008.
- Pr82 ‘Where is the IP Service Market Going?’, Presentation at the Zacco Strategy Seminar, Copenhagen, September 1, 2008.
- Pr83 ‘Teaching and Learning IP in Technology Management, Economics and Business.’ presentation at the 7th Roving workshop - Disseminating knowledge of intellectual property in universities, EPO, Bern, October 14, 2008.
- Pr84 ‘An Introduction to EITIM – Fun & Fear in Academia’, Presentation at the EITIM-Doc seminar, Cambridge, November 8, 2008.
- Pr85 ‘Patents and Innovations for Growth and Welfare.’ Presentation in Seoul, Korea, November 27-28, 2008.

- Pr86 'Finance, Innovation and technology', Presentation prepared for the IMIT 30th Anniversary Roundtable Discussion, Chalmers University of Technology, Gothenburg, March 5, 2009.
- Pr87 'Management of Innovation and Technology in 2025 – An outlook on the future of the field', Presentation at the IMIT 30th Anniversary Seminar on "Trends and Future Challenges in Innovation and Technology Management", Chalmers University of Technology, Gothenburg, March 6, 2009.
- Pr88 'Current Policy Issues in the Governance of the European Patent System.' Opening speech, European Parliament, Brussels, March 17, 2009.
- Pr89 'Status Overview of the MELT project in the Vinnova ODI Program', MELT-meeting, Vinnova, Stockholm, March 19, 2009.
- Pr90 'Operationalization of Key Concepts in the MELT Project – Some preliminary ideas and suggestions', MELT-meeting, Vinnova, Stockholm, March 19, 2009.
- Pr91 'Pressing Economic Policy Issues Relating to Technology, Innovation and IP' Keynote speech, European Patent Forum and Patinnova, Prague, April 28, 2009.
- Pr92 'Do patents in Europe benefit society and the public, or does it stifle innovation?' Seminar speech, European Patent Forum and Patinnova 2009, Prague, April 28, 2009.
- Pr93 'The Future of Management of Innovation and Technology – A 2009 outlook on futures', Presentation at the EITIM-Doc Forum, Chalmers University of Technology, Gothenburg, May 8, 2009.
- Pr94 'Entrepreneurial Finance – Bridge over Troubled Waters', Presentation at the 5th annual Senior Management Forum, University of Cambridge, May 14, 2009, arranged by EITIM – European Institute of Technology and Innovation Management.
- Pr95 'Cultural Differences – Working across cultural differences', Presentation at the 5th annual Senior Management Forum, University of Cambridge, U.K, May 14, 2009, arranged by EITIM – European Institute of Technology and Innovation Management.
- Pr96 'Towards Greater Integration of IP Policies and Institutions in the European Research and Innovation Area', Presentation at the 11th annual SNEE Conference "European Integration in Swedish Economic Research", Mölle, Sweden, May 26-29, 2009.
- Pr97 'Innovation and Intellectual Property in Creative Industries'. IIP Strategy Days, Chalmers, Gothenburg, Sept 4, 2009.
- Pr98 'New Challenges and Directions in IP Valuation'. IIP Strategy Days, Chalmers, Gothenburg, Sept 7, 2009.
- Pr99 'New Models of Innovation for Knowledge-based Business – Opening up innovation and financing in a closing economy'. CIP-forum, Plenary session, Gothenburg, Sept 7, 2009.

- Pr100 ‘IP issues in M&A and Divestments – MAD IP Management’, Gothenburg, Oct 16, 2009.
- Pr101 ‘Looking Ahead – The Business Challenges’. Champs, Gothenburg, Dec 4, 2009
- Pr102 ‘Role of Math & Stat (M&S) in Teaching in Technology / Industrial Management & Economics (M&E). A review/proposal.’, Gothenburg, April 26, 2010.
- Pr103 ‘Teaching in Industrial Economics at the Dept. of Technology Management & Economics at Chalmers Univ. of Technology’, Gothenburg, April 26, 2010.
- Pr104 ‘Patents for Innovation, Growth and Welfare - Do Innovation and IP Policies for a Small Developed Economy Apply to a Large Developing Economy?’. Presentation at the Chinese Patent Office, Beijing, China, May 6, 2010.
- Pr105 ‘Innovation and IP Policies: Patent Granting, Patent Pooling, Standard Setting and Licensing of Rights’, Asian IP Conference, Busan, Korea, May 7, 2010.
- Pr106 ‘The Global Interplay Between National IP Policies and Firm Strategies’. IIP Strategy Day, Chalmers, Gothenburg, Oct 1, 2010.
- Pr107 ‘The Role of Technology, Mathematics and Economics in Educating Industrial Economists’. Presentation at a Swedish national conference on Industrial Economics, Gothenburg, Nov 11, 2010.
- Pr108 ‘IP, Investment and Entrepreneurial Finance for Innovations’. Presentation at IPR University Centre, Aalto University, Helsinki, Finland, Nov 30, 2010.
- Pr109 ‘International IP laws and Policies from an Economic Perspective’. Presentation at Hanken School of Economics, Helsinki, Finland, Dec 3, 2010.
- Pr110 ‘IP Strategies in Open Innovation’. Presentation at Hanken School of Economics, Helsinki, Finland, Dec 9, 2010.
- Pr111 ‘The Economics and Management of New Sustainable Technologies - Was Coase About Right About IP Rights?’ Presentation at The International R&D Management Conference on Innovation and Sustainability, Norrköping, Sweden, June 28-30, 2011
- Pr112 ‘Patents and Innovation for Growth in a Converging World Economy’. Presentation at the World Intellectual Property Organisation WIPO, Geneva, Sept. 5, 2011.
- Pr113 ‘Patents and Innovation for Growth in a Converging World Economy’. Presentation at National University, Seoul, Korea, Nov. 7, 2011.
- Pr114 ‘IPR Developments in Asia and US’. Presentation held from Hong Kong for the 3rd national conference on Industrial Economics at Blekinge Institute of Technology, Nov. 11, 2011.
- Pr115 ‘Towards National Innovation Systems onwards to a Global Innovation System’. Presentation at the conference “Decade of Innovation: India @ Year 1 - A Journey Towards Innovation Driven Economy” organized by Confederation of Indian Industry and National Innovation Council, Government of India, New Delhi, Nov. 17, 2011.

- Pr116 ‘Developing IP Policies and Strategies for Development’. Presentation at “MIPS 2012: 1st International Conference on Management of Intellectual Property and Strategy”. IIT Bombay. Mumbai, Feb 3, 2012.
- Pr117 ‘Managing the Intellectual Property Disassembly Problem’. Presentation at the EPO workshop. München, Germany. June 4, 2012.
- Pr118 ‘Patent Management and Patent Culture – The case of Japan.’ Presentation at “Managing Intellectual Property: Historical Perspectives.” University of Lille, France, March 12, 2014.
- Pr119 ‘IP Strategies and Policies for and against Evergreening.’ Presentation at “European Policy for Intellectual Property” conference, Brussels, Belgium, September 4-5, 2014
- Pr120 ‘Innovation and Patent Policies for Improving Linked Innovation Systems – The Case of Sweden with an Outlook on Europe.’ Presentation at “European Policy for Intellectual Property” conference, Brussels, Belgium, September 4-5, 2014
- Pr121 ‘Suggestions for further research on the patent system.’ Presentation at “Governing Innovation: the law, economics and political economy of patent systems.” Harvard Kennedy School, Massachusetts, USA, January 16-17, 2015.
- Pr122 ‘Nobel Laureate Jean Tirole on Industrial Organization and Innovation Economics.’ Presentation at Department of Physics, Chalmers University of Technology, February 20, 2015.
- Pr122 ‘Technology acquisition and exploitation strategies for growth and diversification in large enterprises.’ Key Note Speech at the Fifth “International Conference on Management of Technology.” The Iranian Association for Management of Technology, Tehran, Iran, December 16-17, 2015.
- Pr123 ‘IP Strategies for Evergreening of Sequential Innovations.’ Paper presented at the “R&D Management Conference.” University of Cambridge, Cambridge, UK, July 3-6, 2016.
- Pr124 ‘The role of patents in open innovation and financing.’ Presentation at “Awapatent breakfast seminar”. Epicenter, Stockholm, Sweden, 28 September 2016.
- Pr125 ‘The Legacy of Nathan Rosenberg and the Importance of Economic History.’ Roundtable discussion at the “ICC Conference Beyond Technological Innovation and Diffusion”. Haas School of Business, University of California, Berkeley, USA, December 11-14, 2016.
- Pr126 ‘Calculation and FRAND principles in IP disputes in the US and Europe.’ Presentation at an AIPPI seminar. Chalmers University of Technology, Sweden, April 27, 2017.
- Pr127 ‘Babbage as X-man.’ University of Cambridge, UK, October 19, 2018.
- Pr128 ‘Technology, IP and Innovation in the Economy – What can we learn from the Nobel Laureates in Economics?’ Leverhulme Trust Lecture. University of Cambridge, UK, December 6, 2018.

## V. TEACHING

### 1. Teaching experience

- a. Undergraduate and Graduate level
  - Control Engineering
  - Operations Research and Decision Analysis
  - Industrial and Technology Management
  - Product Development, Innovation and Entrepreneurship
  - Economics and Management of Technology/Innovation
  - Innovation Economics
  - Economics and Management of Intellectual Property
  - Economics at Department of Economics, Stanford University, US.
  
- b. PhD-level
  - Design of an entire PhD-course program in Technology Management and Economics at Chalmers University of Technology, Sweden
  - Various courses in the PhD-education at Chalmers (PhD-courses in History and Philosophy of Science, R&D Management, Industrial Marketing, Interorganizational Theory, Economics, Strategic Management, Technology Management, Economics of Technology.
  - Various seminars and lectures in Sweden and abroad
  - Graduate course in Economics of Technology and Innovation/IP at Department of Economics, Stanford University, US.
  
- c. Continuing education
  - Organizer of and lecturer in courses for continuing education of industrial managers at Chalmers Univ. of Technology, CHAMPS and the Gothenburg Management Institute

### 2. Teaching material

Graduate and post-graduate level:

- 1) Reflektioner kring logik i modell och verklighet (1970). (In Swedish)
- 2) Kvantitativa metoder inom systemteori med tonvikt på grafteori (1974). (In Swedish)
- 3) Beslutsrationalisering med operationsanalys (1977). (In Swedish)
- 4) Bilder i undervisningen. Rapport från ett NUX-projekt (1981). (In Swedish)
- 5) Compendium in Product and Business Development (1983).
- 6) Excerpts from various reports, books and articles adapted to teaching in Economics and Management of Technology/Innovation and in IP strategies.
- 7) 'Technology, Management and Markets', Pinter Publishers, 1982.



- 8) 'The Economics and Management of Intellectual Property', Edward Elgar Publ., Cheltenham, UK, 1999 (Paperback 2000).
- 9) 'Economics and Management of Technology, Innovation and Intellectual Property'. Course compendium, Chalmers University of Technology, 2007 (570p.).
- 10) 'Innovation and Intellectual Property Cases. Cases in Management, Economics, Law and Technology' (1<sup>st</sup> ed.). Co-edited with Holgersson, M. Chalmers University of Technology, 2011.
- 11) 'Industrial Innovation Economics and Intellectual Property' (7<sup>th</sup> rev. ed.), Published by Svenska Kulturkompaniet, Gothenburg, Sweden, 2018.

## 12) VI. CONSULTING

### 1. Consulting experience

Management consultant to industry – mainly Swedish and foreign MNCs, domestic and foreign government agencies, United Nations and European Commission. Expert witness in IP litigations in Sweden and abroad.

### 2. Open consultancy reports

- 1) 'Evaluation of Project Ind 014 and the Industrial Tribology, Machine Dynamics and Maintenance Engineering Center (ITMMEC) at the Indian Institute of Technology in Delhi'. Coauthored with Jon Sigurdson, L.S. Srinath and A.J. Raman. Norwegian Agency for International Development (NORAD), Oslo, Oct. 1981.
- 2) 'Swedish Coniferous Forest Project, - SWECON. Evaluation report on its organization and management.' Coauthored with Jon Sigurdson in collaboration with Tomas Söderqvist and Göran Wallén. Forskningsrådsnämnden (FRN), Oct. 1981.
- 3) 'Profit from Innovation'. Royal Swedish Academy of Engineering Sciences, Stockholm, 1993. In collaboration with Enrico Deiacco and Jon Sigurdson.
- 4) 'Role and Strategic Use of IPR in International Research Collaborations – Some key issues and problems', Ove Granstrand, Memo submitted to EC expert group/DG12, Oct. 3, 2000.
- 5) 'Role and Strategic Use of IPR in International Research Collaborations – The case of telecom', Ove Granstrand, Working paper submitted to EC expert group/DG12, Dec. 13, 2000.
- 6) 'Role and Strategic Use of Intellectual Property Rights in International Research Collaborations', Final report, April 3, 2002, Ove Granstrand, as member of an independent Expert Working Group with John Adams (Chairman) and Hugh Cameron (Rapporteur), for the European Commission Research Directorate General.
- 7) 'Strategic Use and Adaptation of Intellectual Property Rights Systems in Information and Communications Technologies-based Research.' Expert Group Report, European Commission, 2003.

## VII. MISCELLANEOUS

### 1. Other professional experience

- o Guest researcher at the International Institute of Management, Science Center, Berlin, Dec. 1978.
- o Guest researcher at the Hungarian Academy of Science, Budapest, April 1981, sponsored by the Royal Swedish Academy of Engineering Sciences.
- o Representative of Chalmers Univ. of Technology in the European Society for Engineering Education (SEFI), Working Group Innovation.
- o Invited to give seminars by the State Science and Technology Commission, Beijing, China, August 1982.
- o Study tour to USA, Japan and South-East Asia, Aug.-Sept. 1982 to study techno-economic education, innovation centers and venture business. (Visits to Singapore, Hong Kong, Tokyo, East-West Center, UCLA, Stanford, Berkeley, Washington, Research Triangle in Carolina, MIT, Harvard, Wharton, Imperial College (London)).
- o Field research in Singapore, Hong Kong, Taiwan, South Korea, Japan, and USA, March-April 1983, sponsored by the Japan Foundation.
- o Field research in Japan, May-June 1984, sponsored by the Sweden-Japan Foundation for Research and Development.
- o Opponent in PhD-thesis examinations and member of PhD grading committees.
- o Expert in various nomination committees for professorships.
- o Organizer (together with Prof. J. Sigurdson) of the TIPCE-series of three international conferences on Technology and Industrial Policy in China and Europe.
- o Project leader (together with Prof. J. Sigurdson) for the multinational NORTEL-project - a comparative study of the telecommunication sector in the Nordic countries.
- o Chairman Center for Industrial Engineering and Management (CIPE) at Chalmers University of Technology
- o Various other board memberships at Chalmers Univ. of Technology.
- o Member of the Scientific Advisory Committee for a research program at IIASA, Laxenburg, Austria.
- o Visiting scholar at MIT Sloan School, Cambridge, USA, during 1985/86, including field research in US industry.
- o Guest researcher in the Soviet Union, 1987, 1989, 1990 and 1991, hosted by Academia Nauk.
- o Field research in Japanese industry April-May 1988.
- o Field research in US industry Oct. 1988
- o Study-tour to Japan - Korea 1987, Brazil 1988 and Spain 1989 with the Royal Swedish Academy of Engineering Sciences.
- o Visiting scholar at Stockholm School of Economics during Spring 1990.
- o Chief organizer of an international research conference on 'Technology Management and International Business' in Stockholm, Sweden, June 17-20, 1990.
- o Visiting scholar at SPRU, Univ. of Sussex. Brighton, UK, during Summer 1990.
- o Visiting scholar at Dept. of Economics, Stanford University, USA, during Spring 1991.

- o Chief organizer of an international research conference on ‘Economics of Technology’ at Marstrand, Sweden, August 18-22, 1991.
- o Chief organizer of Holger Bohlin-symposiet, Gothenburg, Dec. 1991 (jointly with Gunnar L. Johansson).
- o Chief organizer (jointly with E. Bohlin) of the European ITS-conference ‘The Race to European Eminence – Who will be the Multinational Telecommunications Carriers in the Future Europe?’, Stenungsund, Sweden, June 20-23, 1993.
- o Ca 100 academic, industrial and government conference presentations and keynote speeches during 2000-2009.  
Member of the Scientific Advisory Committee for the international research conference on technology management in Portland, USA (PICMET), 1991, 2001.
- o Field research in Japanese industry, Summer 1992, Spring 1994, Autumn 1994, Spring 1995.
- o Visiting professor at Dept. of Economics, Stanford Univ., USA 1995/96 and Winter/Spring/Summer 1999.
- o Chief organizer of workshop on ‘Technology and Corporate Diversification’, Gothenburg, Sept. 1997.
- o Chief organizer of the first workshop for ‘European Institute of Technology and Innovation Management’, Gothenburg, Febr. 2000.
- o Chief organizer of ‘The Swedish International Symposium on Economics, Law and Intellectual Property’, Gothenburg, June 26-30, 2000.
- o Chief organizer of ‘CIP Forum’, An international business conference, Gothenburg, June 17-20, 2001.
- o Chief Organizer of the Wallenberg Symposium on ‘Medicine, Technology and Economics’ at the Swedish Royal Academy of Engineering Sciences, 2007.

## **2. Memberships in professional organizations (past and present)**

Creativity & Innovation Network. Past member of the Editorial Consultative Panel

The Journal of Product Innovation Management. Past member of the Editorial Consultative Panel

The Journal of Information Economics and Policy. Member of Board of Editors

Member of the Editorial Board of International Journal of Intellectual Property Management

European Association for Research in Industrial Economics (EARIE)

American Economic Association (AEA)

European Finance Association (EFA)

Institute of Industrial Engineers (IIE) (USA)

International House of Japan Inc.

Japan Management Association

Japan Creators Association

Licensing Executives Society (LES)

Société Européenne pour la Formation des Ingénieurs (SEFI)

Strategic Management Society (USA)

International Telecommunications Society (ITS)

European Institute of Technology Management and Innovation (EITIM)

The International Association for the Protection of Intellectual Property (AIPPI)

### **3. Websites**

Chalmers, <http://www.chalmers.se/sv/personal/Sidor/ove-granstrand.aspx>

<http://www.ip-research.org>

IMIT, [www.imit.se/index.php/fellows/show/106](http://www.imit.se/index.php/fellows/show/106)