

11. Literatura

- [A1] R.D. Lorenz, "Tuning of Field Oriented Induction Motor Controllers for High Performance Applications", *IEEE Trans. on Ind. Appl.*, vol IA-22, No 2, March/April 1986, pp 293 - 297.
- [A2] K.B. Nordin, D.W. Novotny, D.S. Zinger, "The Influence of Motor Parameter Deviations in Feedforward Field Orientation Drive Systems", *IEEE Trans. on Ind. Appl.*, vol IA-21, No 4, July/August 1985., pp 1009 - 1015.
- [A3] M. Boussak, G.A. Capolino, "Modern Control Tools for Identification of the Three Phase Induction Motors", International Conference on Electric Machines, 1988, pp 215-220.
- [A4] F.M. Khater, et. al., " Selection of Flux Level in Field Oriented Induction Machine Controllers with Consideration of Magnetic Saturation Effects", *IEEE Trans. on Ind. Appl.*, vol IA-23, No 2, March/April 1987., pp 276 - 282.
- [A5] E. Levi , S. N. Vukosavić and V. Vučković, " Study of main flux saturation effects in field oriented induction motor drives ", in *Conf. Rec. IEEE Ind. Electron. Soc. Ann. Meet., IECON '89* , pp 219 -224.
- [A6] R. Krishnan, A. S. Bharadwaj, "A Review of Parameter Sensitivity and Adaptation in Indirect Vector Controlled Induction Motor Drive Systems", *IEEE Trans. Power Electron.*, vol. 6, pp. 695–703, Oct. 1991.
- [A7] P.J. da Costa Branco, R. M. Stephan, "A simple adaptive scheme for indirect field orientation of an induction motor", *Proceedings EPE 91*, 2 - 208 , 1991.
- [A8] Hidehiko Sugimoto and Shinzo Tamai, "Secondary Resistance Identification of an Induction-Motor Applied Model Reference Adaptive System and its Characteristics", *IEEE Trans. on Ind. Appl.*, vol. IA-23, No 2 ,1987. ,MARCH/APRIL, pp 296 - 303.
- [A9] R. Schmidt, "On - line identification of the secondary resistance of an induction motor in the low-frequency range using a test vector", *Proc. ICEM '88* , Pisa, pp. 221-225, 1988.
- [A10] L.C. Zai and Thomas A. Lipo, "An Extended Kalman Filter Approach to Rotor Time Constant Measurement in PWM Induction Motor Drives", *IEEE*, 1987., pp 177 - 183.
- [A11] Takayoshi Matsuo and Thomas A. Lipo, "A Rotor Parameter Identification Scheme for Vector - Controlled Induction Motor Drives" , *IEEE Trans. on Ind. Appl.* , vol IA-21, No 4, 1985., pp 624 - 632.
- [A12] Julio C. Moreiar, Thomas A. Lipo, "A new method for rotor time constant tuning in indirect field oriented control ", *PESC 90*, volume II of II, page 573, 1990.
- [A13] R. Krishnam and Frank C. Doran, "A Method of Sensing Line Voltages for Parameter Adaptation of Inverter-Fed Induction Motor Servo Drives ", *IEEE Trans. on Ind. Appl.*, vol. IA-23, pp 617-622, July/August 1987.

- [A14] R.D.Lorenz and D.B. Lawson, "A Simplified Approach to Continuous, On-Line Tuning of Field-Oriented Induction Machine Drives", in *Conf. Rec. of IEEE IAS Annual Meeting*, 1988, pp.444-449.
- [A15] Dalal D.and Krishnan R., "Parameter Compensation of Indirect Vector Controlled Induction Motor Drives using Estimated Air-gap Power ", in *conf.Rec. of the IEEE Annual Meeting* , 1987, pp 170 -176.
- [A16] T. Rowan, R.Kerkman and D. Laggate, "A simple on-line adaptation for indirect field orientation of an induction machine ", *IEEE Trans. on Ind. Appl.* , vol. 37, pp 720 - 727, July/Aug. 1991.
- [A17] L. Garces, "Parameter Adaptation for the Speed-Controlled Static AC Drive with a Squirrel-Cage Induction Motor Operated with Variable Frequency Power Supply", *IEEE Trans. on Ind. Appl.* , vol. IA-16, pp 173-178, Mar./Apr.1980.
- [A18] Masato Koyama, Masao Yano etc., "Microprocessor - based vector control system for induction motor drives with rotor time constant identification function", *IEEE*, vol. IA-22, no.3, May/June 1986.
- [A19] Slobodan N. Vukosavić, Milić R. Stojić, "On-line Tuning of the Rotor Time Constant for Vector-Controlled Induction Motor in Position Servo Applications", *IEEE Trans. Ind. Electron.*, vol.40, no 1, February 1993.
- [A20] D. P. Marcetić, S. N. Vukosavić, "Rotor Parameter Identification in Field-Oriented Induction Machine Control Based on Electrical Torque Estimation", PEMC'98, Prague, 1998.
- [A21] Joachim Holtz, "Methods for Speed Sensorless Control of AC Drives", *Sensorless Control of AC motors, IEEE Press Book*, 1996.
- [A22] Joachim Holtz, "Sensorless Speed and Position Control of Induction Motor Drives", IECON, Roanoke, VA, 2003.
- [A23] C. Ilas, A. Bettini et al. , " Comparison of Different Schemes without Shaft Sensorless for Filed Oriented Control Drives " , *IEEE IECON* , pp. 1579-1588, 1994.
- [A24] A. Abbondanti and M.B. Brennen, "Variable Speed Induction Motor Drives Use Electronic Slip Calculator Based on Motor Voltages and Currents ", *IEEE Trans. on Industry Applications*, vol. IA-11, No 5, pp 483-488, 1975.
- [A25] M. Beck and D. Naunin, " A New Method for the Calculation of the Slip Frequency for a Sensorless Speed Control of a Squirrel-Cage Induction Motor ", *IEEE Power Electronics Specialists Conference*, pp 678-683, 1985.
- [A26] Vinod Sadasivam et al., U.S. Patent: No. 6636011 "Induction Motor Control System", October 2003.
- [A27] Steve Thorn, et. al., " Estimation of Motor Temperature From Terminal Voltages and Automatic Calibration Thereof", Emerson Electric Patent No.,: EMC-04-023, 2005.

- [A28] R. Joetten and G. Maeder, "Control Methods for Good Dynamic Performance Induction Motor Drives Based on Current and Voltage as Measured Quantities", *IEEE Trans. on Industry Applications*, vol. IA-19, pp 356-363, 1983.
- [A29] U. Baader, M Depenbrock and G. Gierse, "Direct Self Control (DSC) of Inverter-Fed Induction Machine, A Basis for Speed Control Without Speed Measurement", *IEEE Trans. on Industry Applications*, vol. 28, No 3, pp 581-588, May/ June, 1992.
- [A30] X. Xu and D.W. Novotny, "Implementation of Direct Stator Flux Orientation Control on a Versatile DSP Based System", *IEEE Trans. on Industry Applications*, vol. 27, No 4, pp 694-700, July/August, 1991.
- [A31] I. Takahashi and T. Noguchi, "A New Quick Response and High Efficiency Control Strategy of an Induction Motor", *IEEE Industry Applications Society Annual Meeting*, pp 496-502, 1985.
- [A32] P. Vas, "Vector Control of AC Machines", Oxford Science Publications, New York, 1990.
- [A33] Colin Schauder, "Adaptive Speed Identification for Vector Control of Induction Motors without Rotational Transducers", *IEEE Trans. on Industry Applications*, vol. 28, No 5, pp 1054-1061, September/October, 1992.
- [A34] M. Wang and E. Levi, "Evolution of Steady-State and Transient Behavior of a MRAS Based Sensorless Rotor Flux Oriented Induction Machine in the Presence of Parameter Detuning", *Electric Machines and Power Systems*, 27, pp. 1171-1190, 1999.
- [A35] Fang-Zheng Peng, Tadashi Fukao and J. S. Lai, "Low Speed Performance of Robust Speed Identification Using Instantaneous Reactive Power for Tacholeless Vector Control of Induction Motors", *IEEE Industry Applications Society*, pp 509-514, 1994.
- [A36] Hisao Kubota, Kouki Matsuse and T. Nakano, "DSP-Based Speed Adaptive Flux Observer of Induction Motor", *IEEE Trans. on Industry Appl.*, vol. 29, No 2, pp 344-348, March/April, 1993.
- [A37] Hisao Kubota, Ikuya Sato, Yuichi Tamura, Kouki Matsue, Hisayishi Ohta, Yoichi Hori, "Regenerating-Mode Low-Speed Operation of Sensorless Induction Motor Drive With Adoptive Observer", *IEEE Trans. on Industry Appl.*, vol. 38, No 4, pp 1081-1086, July/August, 2002.
- [A38] Hisao Kubota and Kouki Matsuse, "Speed Sensorless Field-Oriented Control of Induction Motor with Rotor Resistance Adaptation", *IEEE Trans. on Industry Applications*, vol. 30, No 5, pp 1219-1224, September/October, 1994.
- [A39] T. Du, M.A. Brdys, "Shaft Speed, Load Torque and Rotor Flux Estimation of Induction Motor Drive Using an Extended Luenberger Observer", *Conf. Rec. IEE-EMD'93*, pp 179-184.
- [A40] S. Sangwongwanich, T. Yonemoto et al., "Design of Sliding Observer for Robust Estimation of Rotor Flux of Induction Motor", *Proceedings of IPEC, Tokyo*, pp. 1235 - 1242, 1990.

- [A41] Habib-ur Rehman, Adnan Derdzok et al., "A New Current Model Flux Observer for Wide Speed Range Sensorless Control of an Induction Machine ", *IEEE Trans. on Power El.*, vol. 17, No 6, pp 1041 –1048, November, 2002.
- [A42] Y. R. Kim, S. K. Sul, and M. H. Park, "Speed Sensorless Vector Control of Induction Motor using Extended Kalman Filter ", *IEEE Trans. On Industry Applications*, vol 30, No.5. pp 1225-1233, Sept./Oct., 1994.
- [A43] G. Henneberger, B.J. Brunsbach, T. Klepsch, "Field-Oriented Control of Synchronous and Asynchronous Drives without Mechanical Sensor Using Kalman filter", Conf. Rec. EPE.91', Vol.3, pp. 664 –671.
- [A44] L. B. Brahim and R. Kurosawa, " Identification of Induction Motor Speed Using Neural Network", *IEEE PCC, Yokohama*, pp 689-694, 1993.
- [A45] G. Simoes and B.K. Bose, " Neural Network Based Estimation of Feedback Signals for a Vector Controlled Induction Motor Drive", *IEEE Trans. on Industry Applications*, vol. 31, No 3, pp 620-629, May/June, 1995.
- [A46] M.W. Degner, R.D. Lorenz, "Using Multiple Saliencies for the Estimation of Flux, Position and Velocity in AC Machines", in Conf.Rec. of IEEE IAS Annual Meeting 1997.
- [A47] T. G. Habetler and K. D. Hurst, " Sensorless Speed Measurement Using Current Harmonics Spectral Estimation in Induction Machine Drives ", *IEEE Trans. Pow. Elec.*, vol. 11, No. 1, pp 66-73, January, 1996.
- [A48] K. D. Hurst and T. G. Habetler, " A comparison of Spectrum Estimation Techniques for Sensorless Speed Detection in Induction Machines ", *IEEE Trans. on Industry Applications*, vol. 33, No 4, pp 898-905, July/Aug. ,1997.
- [A49] J. Jiang and J. Holtz, " High Dynamic Speed Sensorless AC Drive with On-Line Model Parameter Tuning for Steady-State Accuracy", *IEEE Trans. on Ind. El.*, vol. 44, No 2, pp 240-246, April, 1997.
- [A50] Kan Akatsu and Atsuo Kawamura, "Sensorless Very Low-Speed and Zero Speed Estimation with Rotor Resistance Estimation of Induction Motor without Signal Injection", *IEEE Trans. on Industry Applications*, vol. 36, No 3, pp 764-771, May/Jun, 2000.
- [A51] Kan Akatsu and Atsuo Kawamura, "Online Rotor Resistance Estimation Using the Transient State Under the Speed Sensorless Control of Induction Motor", *IEEE Trans. on Power Electronics*, vol. 15, No 3, pp 553-560, May, 2000.
- [A52] Hirokazu Tajima, Giuseppe Guidi and Hidetoshi Umida, "Consideration About Problems and Solutions of Speed Estimation Method and Parameter Tuning for Speed-Sensorless Vector Control of Induction Motor Drives, vol. 38, No 5, pp 1282-1289, Sept./Oct., 2002.
- [A53] E. Levi and Mingyu Wang, " A Speed Estimator for High Performance Sensorless Control of Induction Motors in the Field Weakening Region", *IEEE Trans. on Power El.*, vol. 17, No 3, pp 365-377, May, 2002.

- [A54] Kanokvate Tungpimolrut, Fang-Zheng Peng and Tadashi Fukao, "Robust Vector Control of Induction Motor without Using Stator and Rotor Circuit Time Constant", *IEEE Trans. on Industry Applications*, vol. 30, No 5, pp 1241-1246, Sept/Oct, 1994.
- [A55] P. Vas, "Parameter estimation, condition monitoring, and diagnostics of electrical machines", Oxford University Press Inc., New York, 1993.
- [A56] Hamid A. Toliyat, Emil Levi and Mona Raina, "A Review of RFO Induction Motor Parameter Estimation Techniques ", *IEEE Trans. on Energy Conversion*, vol. 18, No 2, pp 271-283, June, 2003.
- [A57] Seok Ho Jeon, Kwang Kyo Oh, and Jin Young Choi, "Flux Observer With Online Tuning of Stator and Rotor Resistances for Induction Motors", *IEEE Trans. Ind. Electron.*, vol. 49, No 3, pp 653-664, June 2002.
- [A58] Dwayne Telford, Matthew W. Dunnigan and Barry W. Williams, "Online Identification of Induction Machine Electrical Parameters for Vector Control Loop Tuning", *IEEE Trans. Ind. Electron.*, vol. 50, No 2, pp 253-261, April 2003.
- [B1] V. Vučković, "Opšta teorija električnih mašina", Nauka, Beograd, 1988.
- [B2] P. Vas, "Electrical Machines and Drives, A Space Vector theory approach", Clearendon Pres, Oxford, 1992.
- [B3] W. Leonard : "Control of Electrical Drives", Springer-Verlag, Berlin, 1985.
- [B4] J. Holtz, "The Representation of AC Machine Dynamics by Complex Signal Flow Graphs", *IEEE Trans. on Industrial Electronics*, Vol. 42, No. 3, 1995, pp. 263-271.
- [B5] N. Mohan, T. Undeland, W. Robbins: "Power Electronics -Converter Applications and Design", John Wiley and Sons, New York, 1989.
- [B6] B. K. Bose : "Power Electronics and AC Drives", Prentice-Hall, New Jersey, 1986.
- [C1] Slobodan N. Vukosavić: "Projektovanje adaptivnog mikroprocesorskog upravljanja brzinom i pozicijom asinhronog motora", doktorska disertacija, Univerzitet u Beogradu, juni 1989.
- [C2] Emil Levi: "Vektorsko upravljanje asinhronim mašinama u prisustvu magnetnog zasićenja", doktorska disertacija, Univerzitet u Beograd, juni 1990.
- [C3] F.M.H.Khater, R.D. Lorenz , D.W. Nowotny, K. Tang: "Selection of Flux Level in Field Oriented Induction Machine Controllers with Consideration of Magnetic Saturation Effects", *IEEE Trans. on Ind. Appl.*, vol. IA-23, No 2 ,1987. , pp 276 - 282.
- [C4] E. Levi and V. Vučković: "Field Oriented Control of Induction Machine in the Presence of Magnetic Saturation", *Electrical Machines Power Sys.*, vol.16, no.2, pp.133-147, 1989.
- [C5] Krishnan. R., Doran F.C.: "Study of Parameter Sensitivity in High - Performance Inverter - fed Induction Motor Drive Systems", *IEEE Trans. on Ind. Appl.*, vol. IA-23, No 4, 1987. , pp 623-635.

- [D1] Chang-Huan Liu, Chen-Chien Hwu and Ying-Fang Feng: "Modeling and Implementation of a Microprocessor-Based CSI-FED Induction Motor Drive Using Field Oriented Control", *IEEE IAS Annual Meeting*, Atlanta, 1987, pp.125-131.
- [D2] D. Marčetić, "Identifikacija električnih parametara rotora asinhronog motora pri malim brzinama obrtanja", Magistarski rad, Beograd, 1998.
- [D3] Milić Stojić: "*Kontinualni sistemi automatskog upravljanja*", Naučna knjiga, 1985.
- [E1] Milić Stojić: "*Digitalni sistemi upravljanja*", Nauka, Beograd, 1990.
- [E2] Robert F. Stengel: *Optimal control and estimation*, Dover Public., inc, N. York, 1994.
- [F1] Slobodan N. Vukosavić, "Digitalno upravljanje električnim pogonima", Akademska misao, Beograd, 2003.
- [F2] D. Landau, "A Hyperstability Criterion for Model Reference Adaptive Control Systems", *IEEE Trans. on Autom. Control*, pp. 552-555, October, 1969.
- [F3] I. D. Landau, "A Generalization of the Hyperstability Conditions for Model Reference Adaptive Control Systems", *IEEE Trans. on Autom. Control*, pp. 246-247, April, 1972
- [F4] P. C. Parks, "Liapunov Redesign of Model Reference Adaptive Control Systems", *IEEE Trans. on Autom. Control*, vol. 11, no. 3, pp. 362-367, July, 1966
- [F5] Joachim Holtz and Juntao Quan, "Sensorless Vector Control of Induction Motors at Very Low Speed Using a Nonlinear Inverter Model and Parameter Identification", *IEEE Trans. Ind. Appl.*, vol. 38, no. 4, pp. 1087-, July/Aug. 2002.
- [F6] Joachim Holtz and Juntao Quan, "Drift- and Parameter-Compensated Flux Estimator for Persistent Zero-Stator-Frequency Operation of Sensorless-Controlled Induction Motors", *IEEE Trans. Ind. Appl.*, vol. 39, no. 4, pp. 1052-, July/Aug. 2003.
- [F7] G. Yang and T. H. Chin, "Adaptive Speed Identification Scheme for a Vector-Controlled Speed Sensorless Inverter-Induction Motor Drive" *IEEE Trans. Ind. Appl.*, vol. 29, no. 4, pp. 820-824, July /Aug. 1993.
- [F8] B. K. Bose, M. G Simoes, D. R. Crecelius, K. Rajashekara and R. Martin, "Speed Sensorless Hybrid Vector Controlled Induction Motor Drive", in *Conf. Rec. IEEE Ind. Appl. Soc. Ann. Meet.*, 1995, pp. 137-143.
- [F9] B. K. Bose, N. R. Patel, "A Sensorless Stator Flux Oriented Vector Controlled Induction Motor Drive with Neuro-Fuzzy Based Performance Enhancement", in *Conf. Rec. IEEE Ind. Appl. Soc. Ann. Meet.*, 1997.
- [F10] Veran V. Vasić, "Upravljanje asinhronim motorom bez davača brzine", doktorska disertacija, Univerzitet u Beogradu, septembar 2000.
- [F11] Maurizio Cirrincione, Marcello Pucci, Giansalvo Cirrincione, and Gérard-André Capolino, "A New TLS-Based MRAS Speed Estimation With Adaptive Integration for High-Performance Induction Machine Drives", *IEEE Trans. Ind. Applicat.*, vol. 40, No 4, pp 1116-1137, July/August, 2004.

- [F12] Toshihiko Noguchi, Seiji Kondo, and Isao Takahashi "Field-Oriented Control of an Induction Motor with Robust On-Line Tuning of Its Parameters", *IEEE Trans. Ind. Applicat.*, vol. 33, No 1, pp 35-42, January/February, 1997.
- [F13] E. Levi and Mingyu Wang, "A Speed Estimator for High Performance Sensorless Control of Induction Motors in the Field Weakening Region", *IEEE Trans. Power Electron.*, vol. 17, No 3, pp 365-377, May, 2002.
- [G1] Hirokazu Tajima and Yoichi Hori: "Speed Sensorless Field-Orientation Control of the Induction Machine", *IEEE Trans. on Ind. Appl.*, vol. 29, no 1, pp 175-180, January/February 1992.
- [H1] Darko Marčetić and Slobodan Vukosavić: "Speed Sensorless AC Drives with the Rotor Time Constant Parameter", *IEEE Trans. on Industrial Electronics*, u štampi, TIE-00288-2005.