PZT

( ) d31

1 PZT flexural vibration

2 3

4

:

[1] Millar, D. " The Behavior of Light Weight Honeycomb Sandwich Panels Under Acoustic Load," Proceedings of the Sixth International Conference on Recent Advances in Structural Dynamics, Vol. 2, Southampton, pp. 995-1006, 1997.

[2] Cunningham, P. R. and White, R. G., " Free Vibration of Doubly Curved Composite Honeycomb Rectangular Sandwich Panels," Proceedings of the 17th International Modal Analysis Conference, Vol. 1, pp. 65-71, 1999.

[3] Cunningham, P. R., White, R. G. and Aglietti, G. S., " The Effects of Various Design Parameters on the Free Vibration of Doubly Curved Composite Sandwich Panels," Journal of Sound and Vibration, Vol. 230, pp. 617-648, 2000.

[4] Oskooei, S. and Hansen, J. S., " Higher-order Finite Element for Sandwich Plates," AIAA Journal, Vol.34, pp. 525-533, 1999.

[5] Lok, T. S. and Cheng, Q. S., " Free Vibration of Damped Orthotropic Sandwich Panel," Journal of Sound and Vibration, Vol. 229, pp.311-327, 2000.

[6] Lai, L., " Study of Free Vibration of Aluminium Honeycomb Panels," MASc Thesis, University of Toronto, Canada, 2002.

[7] Tang, Y. Y., Robinson, J. H. and Silcox, J., " Sound Transmission Through a Cylindrical Sandwich Shell with Honeycomb Core," AIAA paper 1996.

[8] Yu, S. D. and Cleghorn W. L., " Free Flexural Vibration Analysis of Symmetric Honeycomb Panels", Journal of Sound and Vibration, Vol. 284, pp.189-204, 2005.

[9] Sorokin, S. V., Grishina, S. V. and Ershova, O. A., " Analysis and Control of Vibrations of Honeycomb Plates by Parametric Stiffness Modulation", Smart Materials and Structures, Vol.10, pp. 1031-1045, 2001.

[10] www.smart-materials.com [11] Williams, R. B., Inman, D. J. and Wilkie, W. K., " Temperature-Dependent Coefficients of Thermal

Expansion for Macro Fiber Composite Actuators", [12] Williams, R. B., Inman, D. J. and Wilkie, W. K., " Nonlinear Mechanical Behavior of Macro Fiber Composite Actuators", [13] Williams, R. B., Schultz, M. R., Hyer, M. W., Inman, D. J. and Wilkie, W. K., " Nonlinear Tensile and shear behavior of Macro Fiber Composite Actuators," [14] Azzouz, M. S., Mei, C., Bevan, J. S. and Ro, J. " Finite Element Modeling of MFC/AFC Actuators and Performance of MFC",.Journal of Intelligent Materials Systems and Structures, 12(9),pp. 601-612, 2001.

[15] Kim, Seung Jo, Hwanh, Joon Seok and Paik, Seung Hoon " Direct Numerical Simulation of Active Fiber Composite," Proceedings of SPIE 5053, pp. 568-575,2003.

[16] Brennan, M. J., Elliott, S. J.and Pinnington, R. J., " Strategies the Active Control of Flexural Vibration on a Beam," Journal of Sound and Vibration, 186(4), pp.657-688, 1995.

[17] Douglas, J. O. and Balachandran, B., " Control of Flexural wave transmission through struts," SPIE, vol.3668, pp. 80-91, 1999.

[18] Aghil, Y. K. and George, V., " Shape and Location Optimization of Piezoelectric Actuators in Active Control Systems," ASME,vol.52, pp. 559-566, 1996.

[19] Ahmadian, M. and Deguilio, A. P., " Recent Advances in the Use of Piezoceramics for Vibration Suppression," The Shock and Vibration Digest, 33(1), pp. 15-22, 2001.

[20] Hwang. W. S. and Park, H. C., " Finite Element Modeling of PiezoelectricSensors and Actuators" AIAA Journal, Vol.30,No.3, pp.772-780, 1993.

[21] Smyser, C. P., Chandrashekhara, K. " Robust Vibration Control of Composite Beams Using Piezoelectric Devices and Neural Networks" Smart Material and Structures, Vol. 6, No.2,pp.178-189, 1997.

[22] Han, J. H., Rew, K. H. and Lee, I., " An Experimental Study of Active Vibration Control of Composite Structures With a Piezo-Ceramic Actuator and Piezo-Film Sensor" Journal of Smart Material and Structure, pp.549-558, 1997.

[23] Lueg, P., " Process of silencing sound oscillations," US Patent, NO. 2043416, 1936.

[24] Swinbanks, M.A., " The active control of sound propagation in long ducts," Journal of Sound Vibration, 27(3), pp411   436,1973.

[25] Pools, J. H. B., and Leventhall, H. G., " An experimental study of ' Swinbanks' method of active attenuation of sound in ducts,' ' Journal of Sound Vibration, 49, pp.257~266, 1976.

[26] Ross, C. F., " An adaptive digital filter for broadband active sound control," Journal of Sound Vibration, 80, pp.381~388, 1982.

[27] Burgess, J. C., " Active adaptive sound control in a duct : A computer simulation,' ' J.Acoustic.Soc.Am, 70(3) , 1981.

[28] Elliott, H., Derin, H." Modeling and segmentation of noisy and textured images using Gibbs random fields," IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 9 , pp.39 – 55,January.1987 [29] Elliot , S. J., Stothers, M., and Nelson, P" A Multiple Error LMS Algorithm and It's Application to the Active Control of Sound and Vibration" IEEE Transactions on Acoustics, Speech, and Signal rocessing, ASSP-35, NO.10. 1987.

[30] Eriksson, L. J., M. C. Allie, and R. A. Greiner, " The Selection and Application of an IIR Adaptive Filter for Use in Active Sound Attenuation," IEEE Transaction on Acoustics, Speech, and SignalProcessing, Vol. ASSP-35, No. 4, pp. 433-437, April.1987.

[31] Benjamin Friedlander, and Boazporat " Adaptive IIR Algorithm Base on High-order Statistics" IEEE, ASSP-37, NO.4 . 1987 [32] 2001.