

EFFICIENCY IMPROVEMENT OF AN AZIMUTHALLY TRACKED PV PANEL

V. DINICU¹ I. VIŞA¹ D.V. DIACONESCU¹

Abstract: *PV tracking systems based on predefined Sun paths can ensure a significant increase in the PV module conversion efficiency. Using Matlab software, a calculus program is developed for providing the parameters that allow the optimum correlation: daytime (active) number of tracking steps vs directly received solar radiation. The experimental results of the PV trackers have emphasized that the driving energy of the actuators is very low. This paper proposes a new, improved tracking program.*

Key words: *azimuthal tracking, optimized tracking program, energetic efficiency.*

¹ Centre “Product Design for Sustainable Development”, Transilvania University of Braşov.