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FUTURE OF INTELLIGENT WINDOWS

Y.P. SINGH[1] & MONIKA SHEKHAR GUPTA[2]

[1]Director, Amity School of Architecture and Planning, Gwalior, Madhya Pradesh India

[2]Assistant Professor, Amity School of Architecture and Planning, Gwalior, Madhya Pradesh, India

ABSTRACT

The temperature inside a building heavily depends on the incident sun light through the window. A solution to control the building temperature is to dynamically control the transparency of the windows in its window. Smart glass, E-Glass, or switchable glass, also called smart windows or switchable application to windows or skylights, refers to electrically switchable glass or glazing which changes light transmission properties when voltage is applied.

"Smart" window technology is the most promising option and a lot of research is being done in this field that can both save and generate energy, and may ultimately reduce heating and cooling costs for buildings. While allowing us to feel close to the outside world, windows cause heat to escape from buildings in winter and let the Sun's unwanted rays enter in summer. This has sparked a quest for "smart" windows that can adapt to weather conditions outside. In this paper we discussed about how smart windows are limited to regulating light and heat from the sun, allowing a lot of potential energy to escape."The main innovation of this work is that it developed a concept smart window device for simultaneous generation and saving of energy.

KEYWORDS: Intelligent, Windows