Diffusion LGP of LCD Backlight

Jong-Youb Sah*
Dept. of Mechanical Eng., Yeungnam Univ., Korea

Jong-Ryul Park Techsign Co., Ltd., Korea

Some models of backlight have been assembled without the diffusion film to satisfy the required specification of brightness, inspite of the unsatisfaction of the appreance quality. The present study has succeeded in developing the diffusion LGP without deterioration of the appreance quality. The diffusion LGP eliminates essentially the role of diffusion film. The difraction pattern of diffusion LGP does not require the need of diffusion film. The brightness of diffusion LGP has been enhanced up to more than 110%. When compared to other conventional LGP using plastic injection molding process, the diffusion LGP has the advantages as follow: (1) high yield of production, (2) low cost, (3) simplification of assembling process, (4) increase of brightness, (5) superior quality of appreance.