

ABSTRACT

The present invention relates to a PET-film-bonded type transparent anti-UV projection screen and a production method therefor. The PET-film-bonded type transparent anti-UV projection screen comprises a PET film layer, an adhesive layer and a transparent supporting layer which are sequentially stacked from top to bottom, wherein the PET film layer is prepared by uniformly mixing PET resin, an antioxidant, a light stabilizer and a nanoparticle dispersion in a molten state, pre-crystallizing and drying the mixture, and then extruding, stretching and molding the mixture, the nanoparticle dispersion is prepared by uniformly mixing nanoparticles, a dispersant and a solvent, and then dispersing the mixture with ultrasonic waves, and the distribution density of the nanoparticles in the PET film layer is 0.008 to 1.6 g/mm·m². The production method for the PET-film-bonded type transparent anti-UV projection screen comprises: A. preparing a nanoparticle dispersion, B, preparing a PET film, and C, performing coating and bonding the film. Compared with the prior art, the PET-film-bonded type transparent anti-UV projection screen of the present invention is simpler in production process, higher in production efficiency, lower in cost, and higher in transparency and definition, can directly display 2.5D or 3D images without an auxiliary device, has a remarkable imaging effect, and is more convenient to use. In addition, the nanoparticles can absorb ultraviolet rays in the case of light transmission, thereby effectively avoiding the damage by the diffuse reflection of ultraviolet rays to the human body.

(Fig. 1)