

ABSTRACT

TOOTHED BELT, TOOTHED BELT POWER TRANSMISSION APPARATUS,
AND
BUSINESS EQUIPMENT EMPLOYING THE SAME

Disclosed is a belt tooth portion 11 of a toothed belt 8 incorporated in a toothed belt power transmission apparatus for use in equipment for business use. The belt tooth portion 5 11 comprises tooth root portions 12 formed of circularly arcuate surfaces which are arranged symmetrically with each other in respect to a centerline C2 in the tooth width direction, power transmission portions 13 formed of circularly arcuate surfaces of convex profile which 10 contiguously adjoin the tooth root portions 12 and are arranged symmetrically with each other in respect to the tooth width direction centerline C2, tooth tip portions 14 formed of circularly arcuate surfaces which contiguously adjoin the power transmission portions 13 and are arranged 15 symmetrically with each other in respect to the tooth width direction centerline C2, and a tooth crest surface 15 formed of an approximately flat surface which interconnects the tooth tip portions 14. The maximum pressure angle θ_B at a connection point of the power transmission portion 13 and the 20 tooth root portion 12 is set at from 15 degrees to 25 degrees. As a result of such arrangement, the nonuniformity of velocity of the toothed belt 8 is reduced as low as possible, thereby providing improvement in the printing accuracy and image quality of equipment for business use.

Figure 1