직물의 촉감을 평가할 때 일어나는 손동작의 분석

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Analysis of Finger Motion in Evaluating Hand of Fabric

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Abstract

Human uses the sight and the tactilesensations to evaluate the hand of textile fabrics. Especially the tactile sensation is the important factor to decide the hand of a textile fabric. When human evaluates the hand, the physical and physiological phenomena are occurred by the finger motion(the applied force, the speed of finger movement, the touching time, the contact area and the distance of finger movement)and they use a special finger motion according to the purpose of their evaluation. Such sensory evaluation includes resilience, roughness, flexibility and softness. We observed and compared the finger motions of both high sensitive users and low sensitive users. We used a glove type measurement system with pressure sensors and accelerator sensor to investigate the characteristics of finger motion while evaluating a hand of fabric.The sensors provided data on the applied force and direction of finger motion as its patterns. This allowed us to identify and analyze the differences between high sensitive users and low sensitive users. The results show that the finger motion varied according to the user's ability to discriminate, with high sensitive user's finger motion being better suited to sensory evaluation

Keyword : Finger motion, Hand, Pressure sensor, Accelerator sensor