Title: Bending effects on a textile microstrip antenna

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Abstract: This paper describes the design of a textile microstrip antenna for 2.4 GHz. Two different fabrics are used: one for the dielectric part and another one for the conductor part. The dielectric constant of the dielectric fabric is determined experimentally. The input matching is studied by electromagnetic simulation and experimentally. Since the antenna is meant to be incorporated in the user's clothe, the effect that the antenna bending has on the matching level is also investigated both theoretically and experimentally.

Author Keywords: Textile Microstrip Antenna; Antenna Bending; Fabrics Charaterization

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