RESEARCH AND DEVELOPMENT OF A PSK MODULATOR

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ชื่อนิสิต	นายโมฮัน ศังกร อมาตยะ
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ปีการศึกษา	๒๕๒๑

หอสมุดกลาง จุฬาลงกรณมหาวิทยาลัย

บทคัดย่อ

ในวิทยานิพนธ์ฉบับนี้ ได้มีการศึกษาและสร้าง พีเอสเค โมดูเลเตอร์ ขึ้น โดยใช้เทคนิคโมดูเลชั่นแบบอาร์มสตรอง และใช้วงจร IC เพื่อปรับปรุงประสิทธิภาพการทำงานให้ดีขึ้น พีเอสเค โมดูเลเตอร์นี้ผ่านการทดสอบหลายต่อหลายครั้งจนมีผลเป็นที่น่าพึงพอใจ เราใช้ตัวเปลี่ยนเฟส (phase shifter) ที่สามารถปรับเฟสได้ เพื่อให้ พีเอสเค โมดูเลเตอร์ สามารถโมดูเลตเฟสได้โดยมีเฟสเบี่ยงเบนจากเชิงเส้นตรงสมบูรณ์อย่างมากไม่เกิน ± 1.05° ในช่วง ± 90°

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ABSTRACT

A new PSK modulator is devised using Armstrong modulation technique and integrated circuits to improve the performance. This PSK modulator is experimentally tested. Using an adjustable phase-shifter, this PSK modulator is attempted to have the phase deviation from perfect linearity by ± 1.05 degree maximum in the range of ± 90 degrees.

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