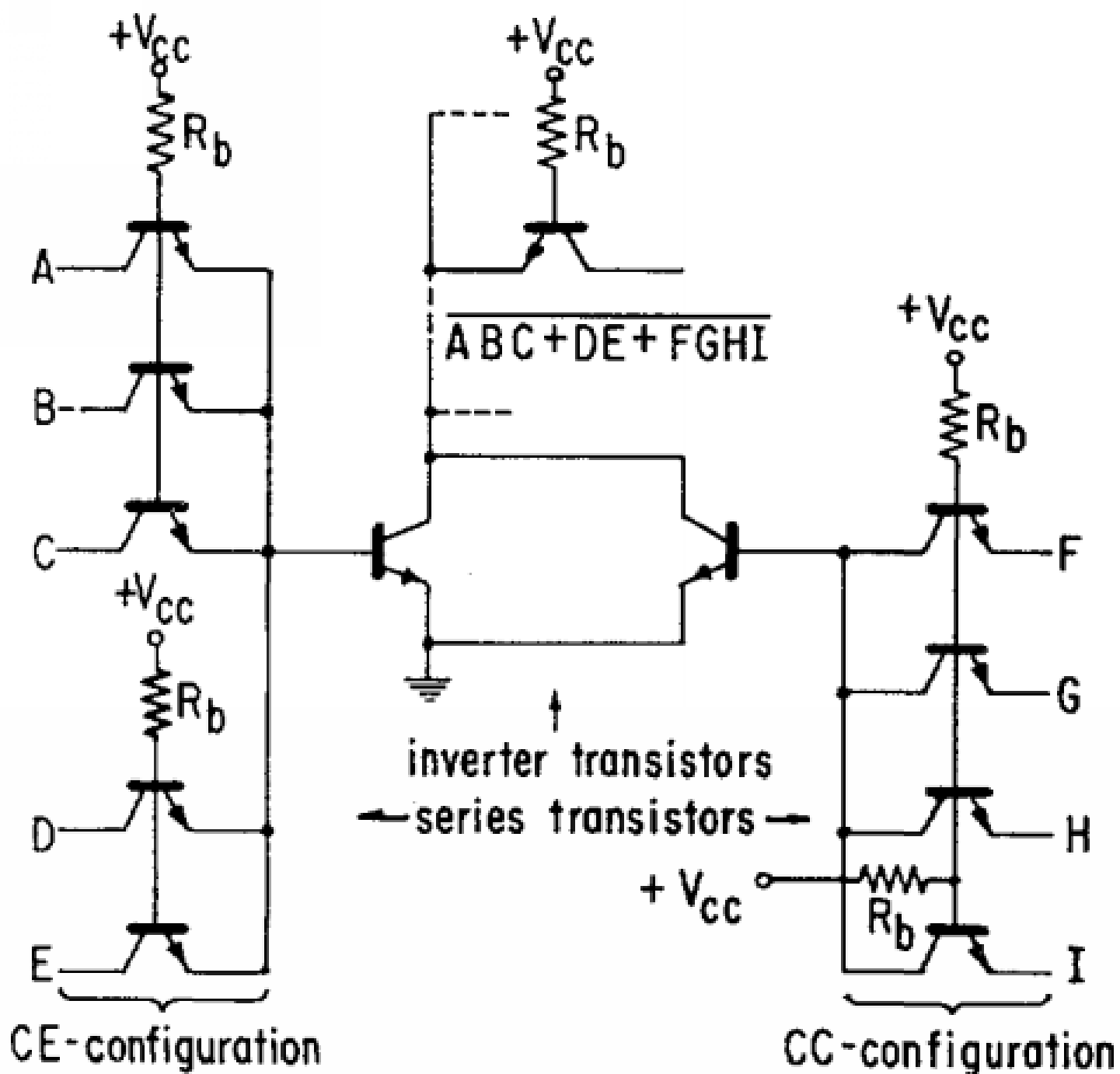


FIRST TTL LOGIC CIRCUITS

ISSCC 1962



New Forms of All-Transistor Logic

NEW BIPOLAR CIRCUIT families continued to appear in order to allow higher integration densities. One of the most important new bipolar circuit families to appear was the all-transistor logic, or TTL (transistor-transistor logic) which operated by a single power supply and introduced the "totem-pole" push-pull output. The TTL circuit style soon became widely adopted, marking another milestone in the push towards ever higher integration densities.