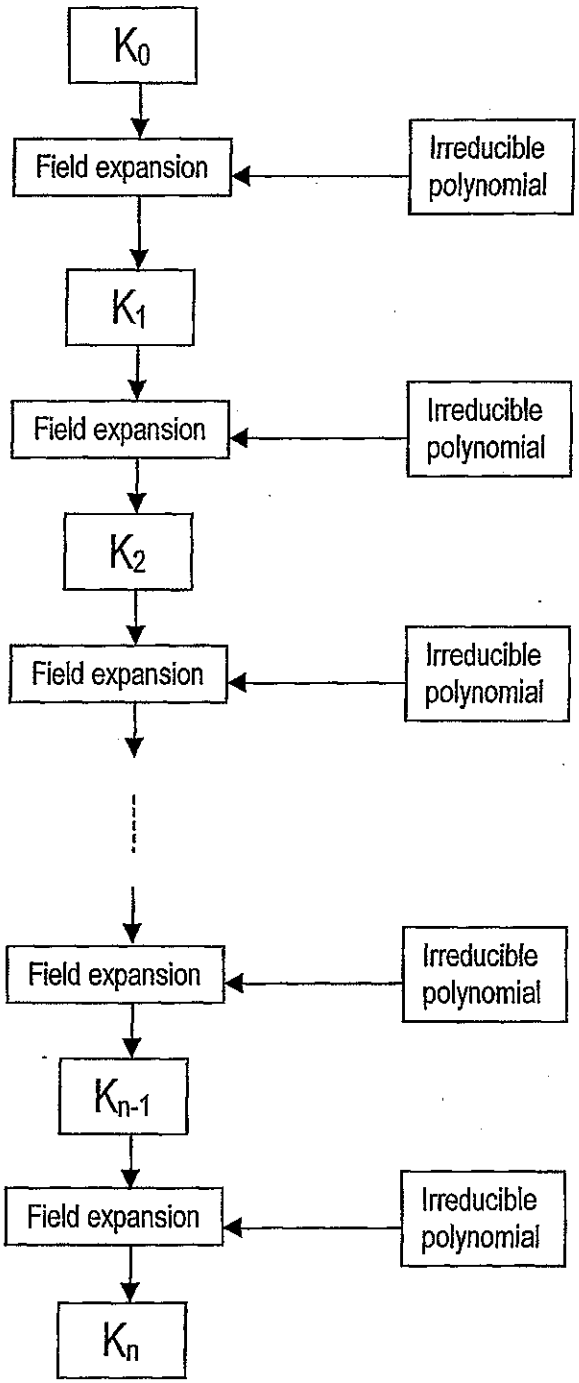
DRAWINGS

FIGURE 1



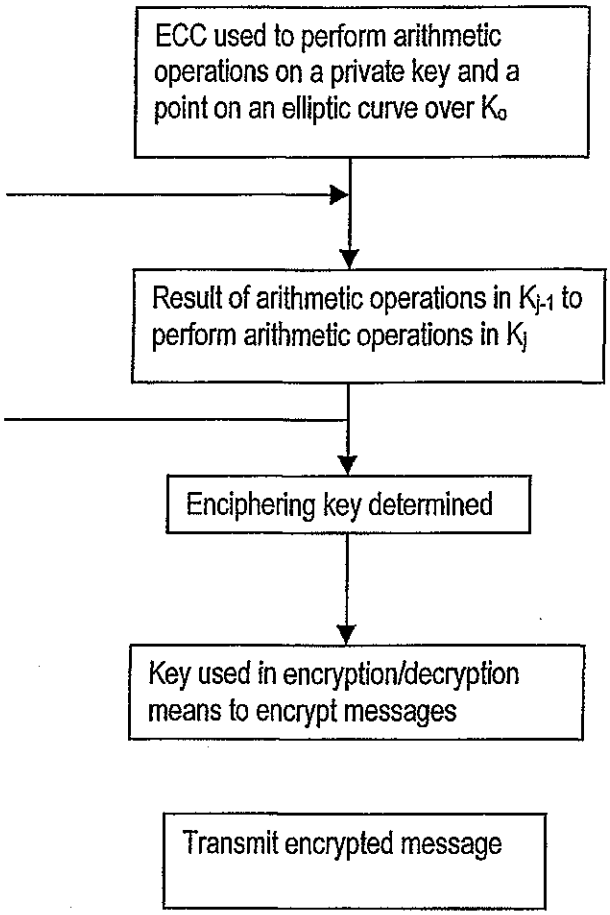
K_0: basic field with small number of elements

K_1: expansion field of K_0 by an irreducible polynomial of K_0

K_2: expansion field of K_1 by an irreducible polynomial of K_1

K_n: expansion field of K_{n-1} by an irreducible polynomial of K_{n-1}

FIGURE 2


ECC used to perform arithmetic operations on a private key and a point on an elliptic curve over K_o
Result of arithmetic operations in K_{j-1} to perform arithmetic operations in K_j
Enciphering key determined
Key used in encryption/decryption means to encrypt messages
Transmit encrypted message