ABSTRACT

To improve encryption technology for a data processing apparatus in order to reduce a possibility of having communication broken by a third party. The data processing apparatus encrypts subject data and renders it as encrypted data to record it on a predetermined recording medium, and decrypts the encrypted data recorded on the recording medium to change it back to the subject data. The encryption is performed in units of plain text cut data generated by cutting the subject data by a predetermined number of bits, where the number of bits of the plain text cut data is varied and dummy data of a size having the number of bits matching with a piece of the plain text cut data of the largest number of bits is mixed with pieces of the plain text cut data other than that of the largest number of bits out of the plain text cut data.