A finite volume - alternating direction implicit method is proposed for numerical valuation of the American options under
the Heston model. It is based on decoupling correlated stock price process and volatility process so that corresponding
partial differential operator does not contain the mixed partial derivative term. Hence the proposed method is numerically
simple and fast. Numerical results are presented to examine the accuracy of the proposed method and to compare it with
the others. (Received September 06, 2018)