The present invention relates to the synthesis of ivabradine of formula (I):

Ivabradine is prepared by catalytic reductive amination of the compound (V) with the amine (VI) under hydrogen pressure in an organic solvent and, optionally, in the presence of trimethylamine *N*-oxide:

A metallorganic compound based on iron, cyclopentadiene and carbon monoxide is used as catalyst. The proposed process allows of excluding the use of catalysts based on precious metals, such as palladium, in the synthesis of ivabradine.

Claims: 15