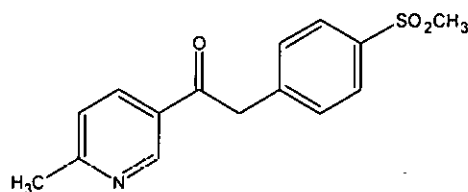




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We claim:

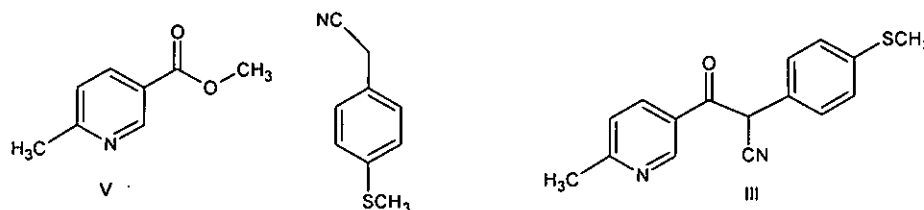
1. A process for the preparation of 1-(6-methylpyridin-3-yl)-2-[(4-(methylsulphonyl)phenyl)ethanone of the formula I



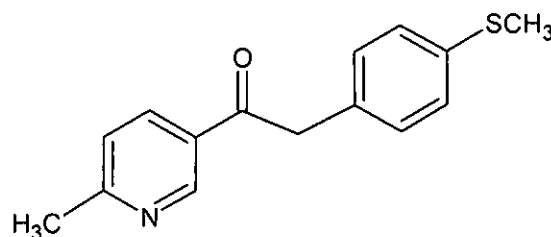
I

comprising:

- a) condensing 4-(methylthio)phenylacetonitrile of formula IV with a 6-methylnicotinic ester of formula V to give 3-[2-(4-(methylthio)phenyl)-2-cyanoacetyl](6-methyl)pyridine of formula III;



- b) hydrolysing and decarboxylating 3-[2-(4-(methylthio)phenyl)-2-cyanoacetyl](6-methyl)pyridine of formula III in presence of H_2SO_4 and in absence of mixture of acetic acid and HCl to obtain 3-[2-(4-(methylthio)phenyl)acetyl](6-methyl)pyridine of formula II;



II

- c) in situ oxidation of 3-[2-(4-(methylthio)phenyl)acetyl](6-methyl)pyridine of formula II in presence of hydrogen peroxide, H_2SO_4 , & acetic acid and in absence of an alkali metal tungstate catalyst to give Ketosulfone of formula I; and

- d) purification of obtained ketosulfone using methanol to obtain tungsten free ketosulfone of formula I.
2. The process according to claim 1 wherein the condensation in step a is carried out in presence of an alkali metal alkoxide selected from sodium methoxide and potassium tertbutoxide.
 3. The process according to claim 1 wherein the condensation in step a is carried out in methanol, ethanol or toluene.
 4. The process according to claim 1 wherein the condensation in step a is carried out at temperature 70 to 110 °C, preferably 100 to 110 °C.
 5. The process according to claim 1 wherein the hydrolysis and decarboxylation in step b is carried out at a temperature 90 to 110 °C.
 6. The process according to claim 1 wherein the obtained ketosulfone of formula I is purified using methanol hot pulping.

Dated this 29th day of October 2011

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