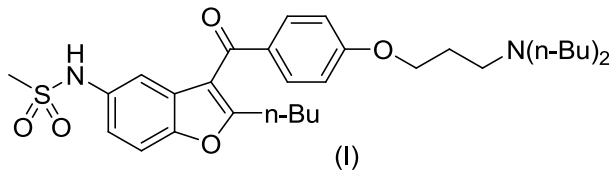
WE CLAIM:

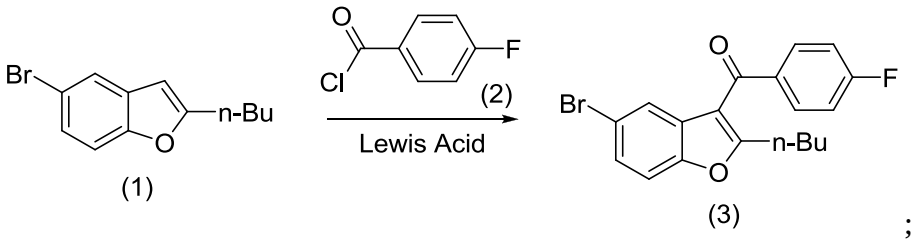
1. A process for making dronedarone of formula I



(I)

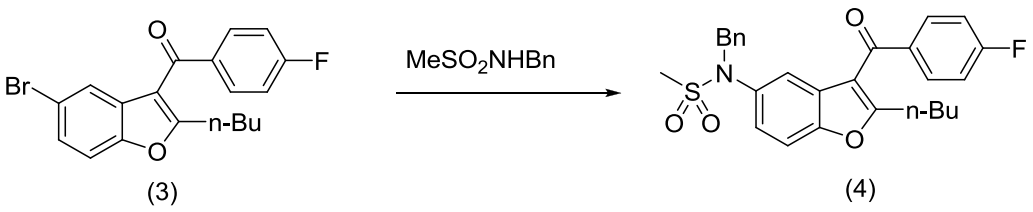
or a pharmaceutically acceptable salt thereof, comprising the steps of:

a. reacting the compound of formula (1) with the compound of formula (2) in the presence of a Lewis acid and a suitable solvent to form the compound of formula (3) as shown below:



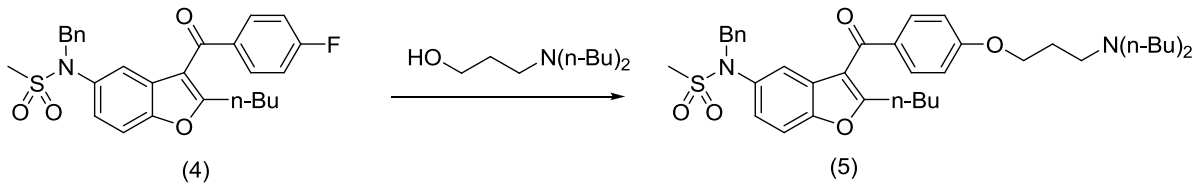
;

b. reacting the compound of formula (3) with *N*-benzylmethanesulfonamide ($MeSO_2NHBn$) in the presence of a suitable catalyst and a suitable solvent to form the compound of formula (4) as shown below:



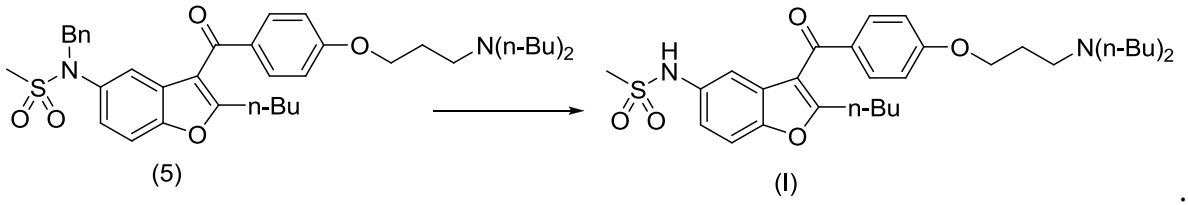
;

c. reacting the compound of formula (4) with dibutylaminopropanol in the presence of a suitable base and a suitable solvent to form the compound of formula (5) as shown below:



;

d. reacting the compound of formula (5) with a suitable deprotecting agent to form the compound of formula (I) as shown below:

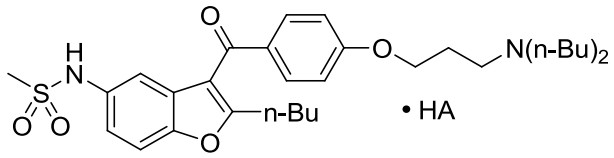


(5) (I)

.

2. The process according to claim 1 wherein the reaction to prepare compound of formula (4) comprises use of Cu or palladium catalysts.

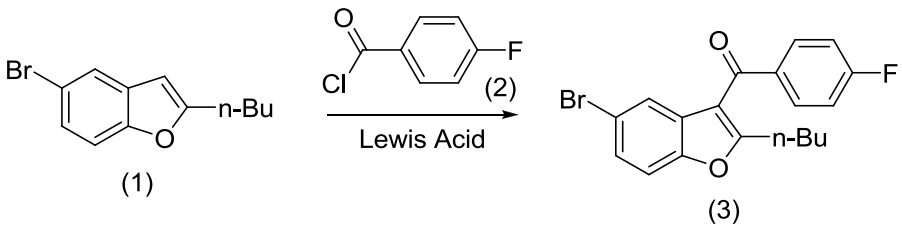
3. A process for making dronedarone acid addition salt



(I)

comprising the steps of:

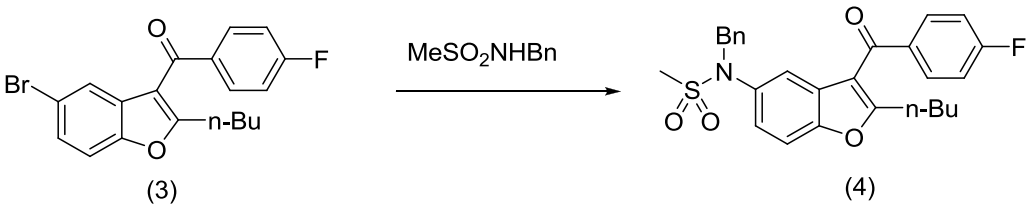
a. reacting the compound of formula (1) with the compound of formula (2) in the presence of a Lewis acid and a suitable solvent to form the compound of formula (3) as shown below:



(1) (3)

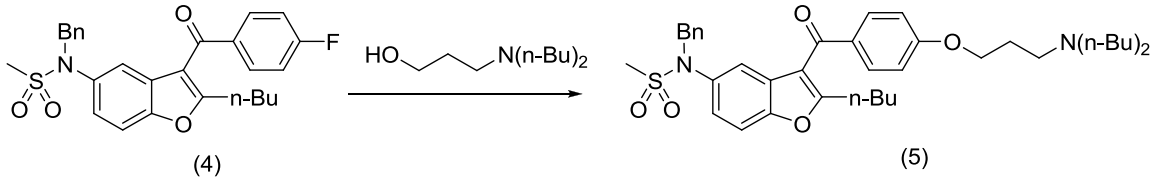
;

b. reacting the compound of formula (3) with *N*-benzylmethanesulfonamide (CH_3SO_2NHBn) in the presence of a suitable catalyst and a suitable solvent to form the compound of formula (4) as shown below:



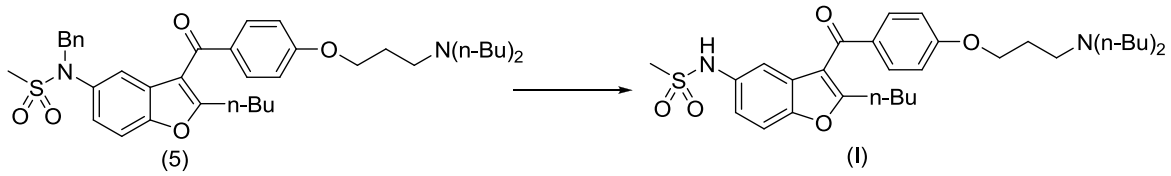
(3) (4)

c. reacting the compound of formula (4) with dibutylaminopropanol in the presence of a suitable base and a suitable solvent to form the compound of formula (5) as shown below:



(4) (5)

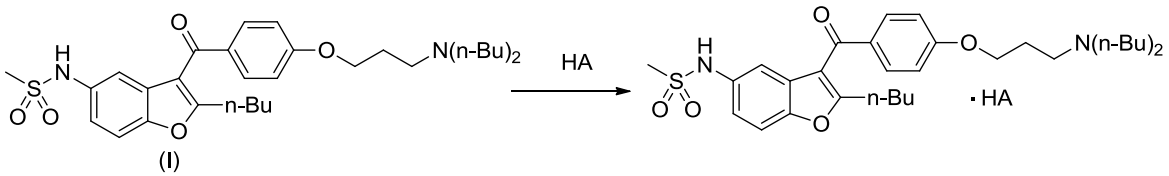
d. reacting the compound of formula (5) with a suitable deprotecting agent to form the compound of formula (I) as shown below:



(5) (I)

; and

e. reacting the compound of formula (I) with a suitable acid (HA) and a suitable solvent to afford the acid salt of the compound of formula (I) as shown below:

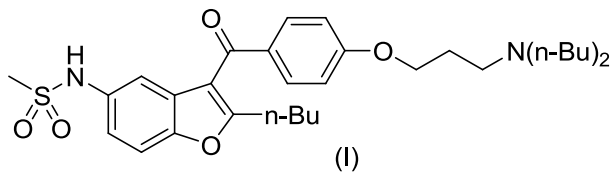


(I)

.

4. The process according to Claim 3 wherein the reaction to prepare compound of formula (6) comprises use of Cu or palladium catalysts.

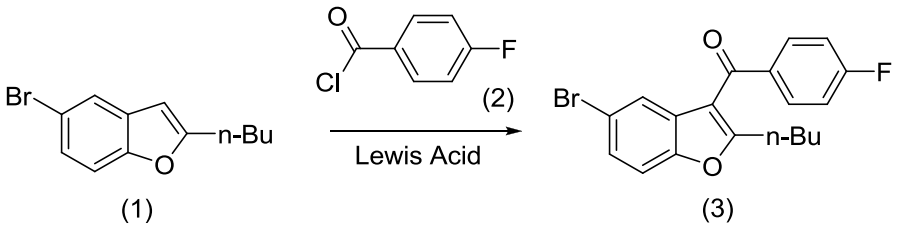
5. A process for making dronedarone of formula (I)



(I)

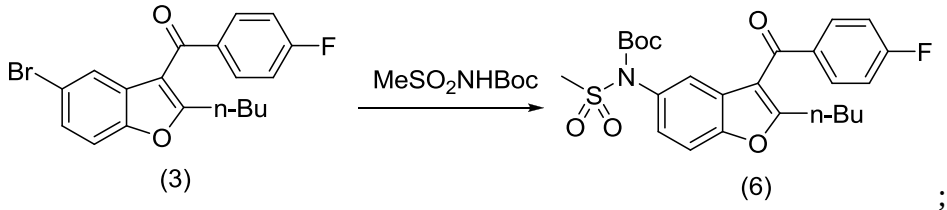
or a pharmaceutically acceptable salt thereof, comprising the steps of:

a. reacting the compound of formula (1) with the compound of formula (2) in the presence of a Lewis acid and a suitable solvent to form the compound of formula (3) as shown below



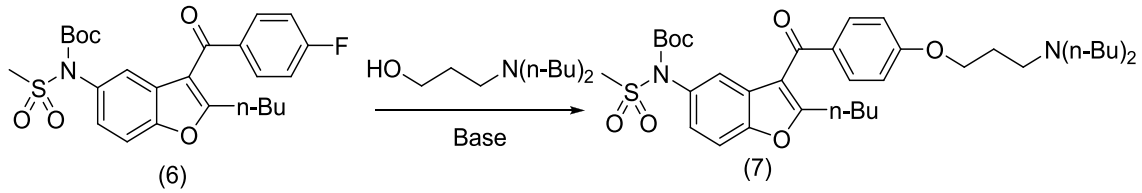
;

b. reacting the compound of formula (3) with Boc-protected methanesulfonamide and a suitable catalyst and a suitable solvent to afford the Boc-protected compound of formula (6) as shown below:



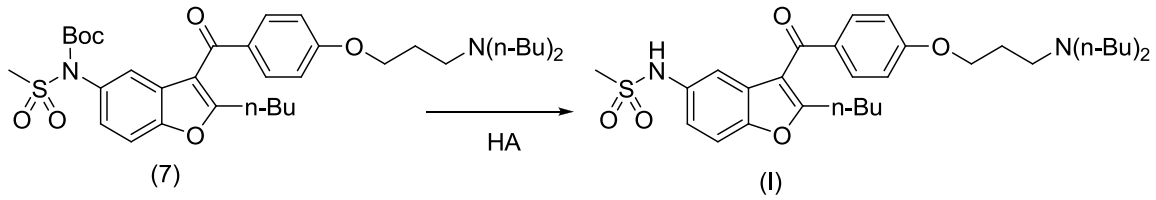
;

c. reacting compound of formula (6) with dibutylaminopropanol, a suitable base and a suitable solvent to afford the compound of formula (7) as shown below:



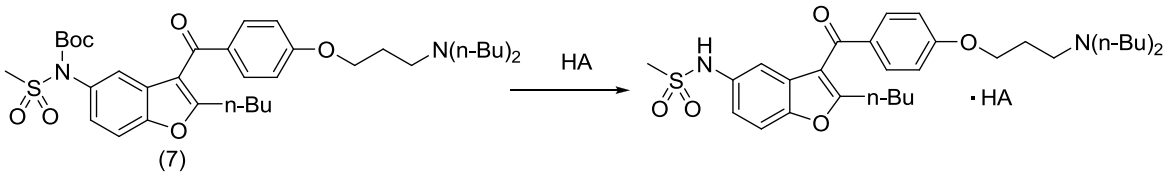
; and

d. reacting the compound of formula (7) with a suitable acid (HA) and a suitable solvent to afford the compound of formula (I) as shown below:

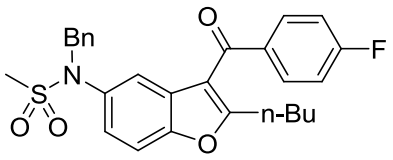


.

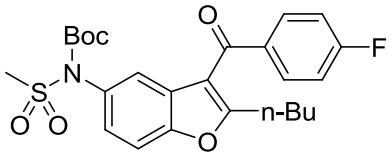
6. The process of claim 5, further comprising the step of reacting the compound of formula (7) with sufficient amount of a suitable acid to form the acid salt of the compound of formula (1) as shown below:



7. A compound of the formula (4) or formula (6)



(4)



(6)