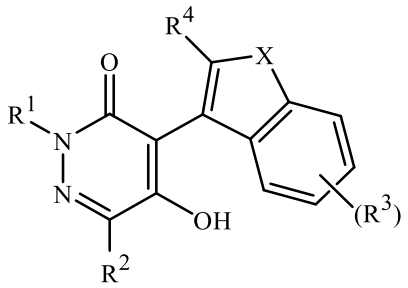
THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A process for preparing a compound of Formula **1**



**1**

wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkylcarbonylalkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_2$–$C_7$ haloalkoxyalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_2$–$C_3$ alkoxycarbonyl; or phenyl optionally substituted by halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl;

X is O or S; or

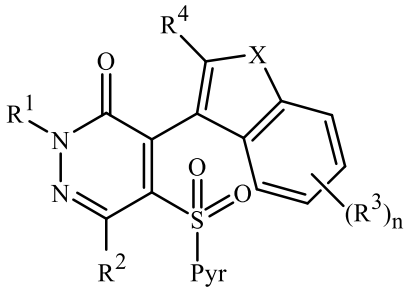
X is -C($R^6$)=C($R^7$)-, wherein the carbon atom bonded to $R^6$ is also bonded to the carbon atom bonded to $R^4$, and the carbon atom bonded to $R^7$ is also bonded to the phenyl ring moiety in Formula **1**;

each $R^3$ is independently halogen, -CN, nitro, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$ haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy, $C_1$–$C_5$ haloalkoxy, $C_1$–$C_5$ alkylthio, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl;

n is 0, 1, 2 or 3; and

$R^4$, $R^6$ and $R^7$ are independently H, halogen, nitro, -CN, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$ haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy, $C_1$–$C_5$ haloalkoxy, $C_1$–$C_5$ alkylthio, $C_1$–$C_4$ alkylsulfinyl, $C_1$–$C_4$ alkylsulfonyl, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl;

comprising hydrolyzing a compound of Formula **2**



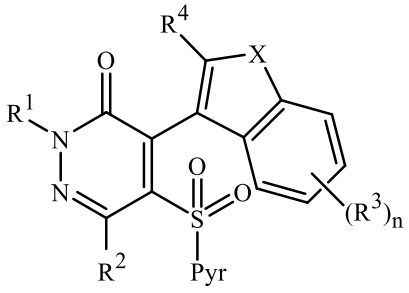
**2**

wherein

$R^1$, $R^2$, $R^3$, n, $R^4$, X, $R^6$ and $R^7$ are defined for Formula **1** above; and

Pyr is a pyridine ring optionally substituted with halogen or $C_1$–$C_4$ alkyl.

2. A compound of Formula **2**



**2**

wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkylcarbonylalkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_2$–$C_7$ haloalkoxyalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_2$–$C_3$ alkoxycarbonyl; or phenyl optionally substituted by halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl;

X is O or S; or

X is -C($R^6$)=C($R^7$)-, wherein the carbon atom bonded to $R^6$ is also bonded to the carbon atom bonded to $R^4$, and the carbon atom bonded to $R^7$ is also bonded to the phenyl ring moiety in Formula **2**;

each $R^3$ is independently halogen, -CN, nitro, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$

haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy, $C_1$–$C_5$ haloalkoxy, $C_1$–$C_5$ alkylthio, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl;

n is 0, 1 or 2;

$R^4$, $R^6$ and $R^7$ are independently H, halogen, nitro, -CN, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$ haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_4$–$C_5$ alkoxy, $C_4$–$C_5$ haloalkoxy, $C_4$–$C_5$ alkylthio, $C_1$–$C_4$ alkylsulfinyl, $C_1$–$C_4$ alkylsulfonyl, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl; and

Pyr is a pyridine ring optionally substituted with halogen or $C_1$–$C_4$ alkyl.

3. The compound of Claim 2 wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_1$–$C_7$ haloalkyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_1$–$C_7$ haloalkyl or $C_2$–$C_7$ alkoxyalkyl;

each $R^3$ is independently halogen, $C_4$–$C_5$ alkyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_2$–$C_5$ alkoxyalkyl, $C_4$–$C_5$ alkoxy, $C_4$–$C_5$ haloalkoxy or $C_1$–$C_5$ alkylthio;

$R^4$, $R^6$ and $R^7$ are independently H, halogen, $C_4$–$C_5$ alkyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy or $C_1$–$C_5$ alkylthio; and

Pyr is a pyridine ring optionally substituted with F, Cl, Br or $CH_3$.

4. The compound of Claim 3 wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl or $C_4$–$C_7$ cycloalkylalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl or $C_2$–$C_7$ alkoxyalkyl;

X is S; or

X is -C($R^6$)=C($R^7$)-, wherein the carbon atom bonded to $R^6$ is also bonded to the carbon atom bonded to $R^4$, and the carbon atom bonded to $R^7$ is also bonded to the phenyl ring moiety in Formula **2**;

each $R^3$ is independently halogen, $C_4$–$C_5$ alkyl, $C_3$–$C_5$ cycloalkyl or $C_1$–$C_5$ alkoxy;

$R^4$, $R^6$ and $R^7$ are independently H, halogen, $C_1$–$C_5$ alkyl or $C_1$–$C_5$ alkoxy; and

Pyr is a 2-pyridinyl ring optionally substituted with F, Cl, Br or $CH_3$.

5. The compound of Claim 4 wherein

$R^1$ is H or $C_1$–$C_7$ alkyl;

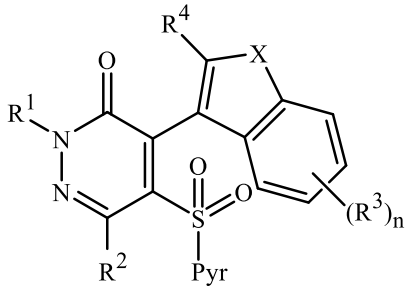
$R^2$ is $C_1$–$C_7$ alkyl or $C_3$–$C_7$ cycloalkyl;

X is S;

each $R^3$ is independently halogen $C_1$–$C_5$ alkyl or $C_1$–$C_5$ alkoxy;
$R^4$ is H, halogen or $C_1$–$C_5$ alkyl; and
Pyr is an unsubstituted 2-pyridinyl ring.

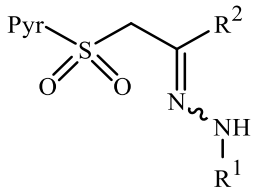
6. The compound of Claim 4 wherein
$R^1$ is H or $C_1$–$C_7$ alkyl;
$R^2$ is $C_1$–$C_7$ alkyl or $C_3$–$C_7$ cycloalkyl;
X is -C($R^6$)=C($R^7$)-, wherein the carbon atom bonded to $R^6$ is also bonded to the carbon atom bonded to $R^4$, and the carbon atom bonded to $R^7$ is also bonded to the phenyl ring moiety in Formula **2**;
each $R^3$ is independently halogen, $C_1$–$C_5$ alkyl or $C_1$–$C_5$ alkoxy;
$R^4$, $R^6$ and $R^7$ are independently H, halogen or $C_1$–$C_5$ alkyl; and
Pyr is an unsubstituted 2-pyridinyl ring.

7. A process for preparing the compound of Formula **2**



**2**

comprising cyclizing the product of the reaction between a compound of Formula **4**



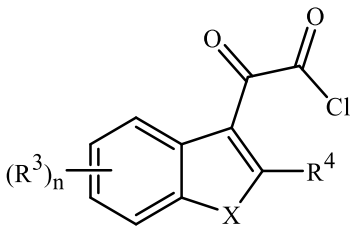
**4**

wherein
$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;
$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkylcarbonylalkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_2$–$C_7$ haloalkoxyalkyl,

$C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_2$–$C_3$ alkoxycarbonyl; or phenyl optionally substituted by halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl; and

Pyr is a pyridine ring optionally substituted with halogen or $C_1$–$C_4$ alkyl;

with a compound of Formula **3**



**3**

wherein

X is O or S; or

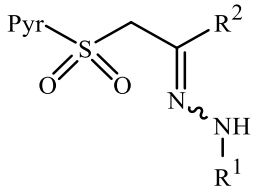
X is -C($R^6$)=C($R^7$)-, wherein the carbon atom bonded to $R^6$ is also bonded to the carbon atom bonded to $R^4$, and the carbon atom bonded to $R^7$ is also bonded to the phenyl ring moiety in Formula **3**;

each $R^3$ is independently halogen, -CN, nitro, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$ haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy, $C_1$–$C_5$ haloalkoxy, $C_1$–$C_5$ alkylthio, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl;

n is 0, 1, 2 or 3; and

$R^4$, $R^6$ and $R^7$ are independently H, halogen, nitro, -CN, $C_1$–$C_5$ alkyl, $C_2$–$C_5$ alkenyl, $C_2$–$C_5$ alkynyl, $C_3$–$C_5$ cycloalkyl, $C_4$–$C_5$ cycloalkylalkyl, $C_1$–$C_5$ haloalkyl, $C_3$–$C_5$ haloalkenyl, $C_3$–$C_5$ haloalkynyl, $C_2$–$C_5$ alkoxyalkyl, $C_1$–$C_5$ alkoxy, $C_1$–$C_5$ haloalkoxy, $C_4$–$C_5$ alkylthio, $C_1$–$C_4$ alkylsulfinyl, $C_1$–$C_4$ alkylsulfonyl, $C_1$–$C_5$ haloalkylthio or $C_2$–$C_5$ alkoxycarbonyl.

8. A compound of Formula **4**



**4**

wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkylcarbonylalkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_2$–$C_7$ haloalkoxyalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_2$–$C_3$ alkoxycarbonyl; or phenyl optionally substituted by halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl; and

Pyr is a pyridine ring optionally substituted with halogen or $C_1$–$C_4$ alkyl.

9. The compound of Claim 8 wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_1$–$C_7$ haloalkyl, $C_2$–$C_7$ alkoxyalkyl or $C_3$–$C_7$ alkylthioalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_1$–$C_7$ haloalkyl or $C_2$–$C_7$ alkoxyalkyl; and

Pyr is a pyridine ring optionally substituted with F, Cl, Br or $CH_3$.

10. The compound of Claim 9 wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl or $C_4$–$C_7$ cycloalkylalkyl;

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl or $C_2$–$C_7$ alkoxyalkyl; and

Pyr is a 2-pyridinyl ring optionally substituted with F, Cl, Br or $CH_3$.

11. The compound of Claim 10 wherein

$R^1$ is H or $C_1$–$C_7$ alkyl;

$R^2$ is $C_1$–$C_7$ alkyl or $C_3$–$C_7$ cycloalkyl; and

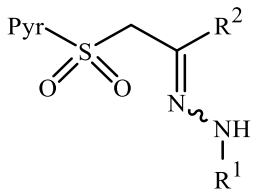
Pyr is an unsubstituted 2-pyridinyl ring.

12. The compound of Claim 11 wherein

$R^1$ is H or $CH_3$; and

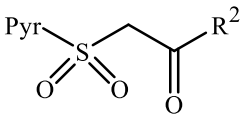
$R^2$ is $CH_3$ or *c*-Pr.

13. A process for preparing the compound of Formula **4**



**4**

comprising contacting a compound of Formula **5**



**5**

wherein

$R^2$ is $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkylcarbonylalkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_2$–$C_7$ haloalkoxyalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl or $C_2$–$C_3$ alkoxycarbonyl; or phenyl optionally substituted by halogen, $C_1$–$C_4$ alkyl or $C_1$–$C_4$ haloalkyl; and

Pyr is a pyridine ring optionally substituted with halogen or $C_1$–$C_4$ alkyl;

with a hydrazine of Formula **6**

$$R^1NHNH_2$$

**6**

wherein

$R^1$ is H, $C_1$–$C_7$ alkyl, $C_3$–$C_8$ alkoxycarbonylalkyl, $C_4$–$C_7$ alkylcycloalkyl, $C_3$–$C_7$ alkenyl, $C_3$–$C_7$ alkynyl, $C_3$–$C_7$ cycloalkyl, $C_4$–$C_7$ cycloalkylalkyl, $C_2$–$C_3$ cyanoalkyl, $C_1$–$C_4$ nitroalkyl, $C_1$–$C_7$ haloalkyl, $C_3$–$C_7$ haloalkenyl, $C_2$–$C_7$ alkoxyalkyl, $C_3$–$C_7$ alkylthioalkyl.