

Our Ref: 202221034803/Pre-Grant

Date: 24th June, 2023

To,
The Controller of Patents,
Bhoudhik Sampada Bhavan,
Shaikh Mistry Rd,
Near Antop Hill,
Mumbai, Maharashtra 400037

Sub: Pre-Grant hearing Notice in Reference of Application No. 202221034803 on 15th June, 2023

Dear Sir,

With reference to Pre-Grant Opposition filed in in Application No 202221034803 and reply to the same file in the application, a hearing is fixed in the matter through Video Conferencing on 15/06/2023 at 15:00 HRS(IST) for (3h). In continuation to this, I would like to state that opponent Mr. T. Iyer did not appear in this hearing process, and the entire proceeding was carried out between the Desai Niseeth Chhotalal (inventor of the instant application) and Dr. Amarendra Samal, Deputy Controller of Patents & Designs. The hearing took place on the following points which was submitted by the opponent.

- (a) Novelty or anticipation by prior publication (Section 25(1)(b))
- (b) Lacks inventive step (Section 25(1)(e))
- (c) Not an invention (Section 25(2)(f))
- (d) Clarity and insufficiency (Section 25(2)(g))
- (e) Novelty, Inventiveness, and other aspect of the instant application under the section 14 of Patents Act 1970 for consideration by the Learned Controller.

The applicant has defends all the points raised by the opponent and it was very well appreciated by the learned Deputy Controller of Patents. The applicant filed detailed written submissions and relevant documents on 24/03/2023. The learned controller had acknowledged the receipt of the written submission and during the hearing, it was discussed in detail. The learned

controller suggested also raise objections over the scope and inventiveness of the claims. The applicant herewith submits the amended claims.

We are attaching herewith a clean and marked copy for your further action on our invention. The applicant prays to the Learned Controller to dismiss the pre-grant opposition filed against the said patent application.

We further request the Learned Controller to grant us an opportunity of being heard in the matter before taking any adverse decision against the patent application.

Yours faithfully,

For, M K Bhavnagar University, Bhavnagar,

Signature

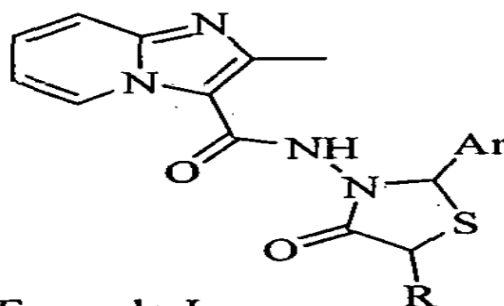
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Date: 24th June, 2023

Prof. Nisheeth C. Desai

MARKED-UP CLAIMS

1. An anti-malarial compound Thiazolidin-3-yl-imidazo-pyridine-3-carboxamide of formula I, ~~or its metabolites thereof,~~



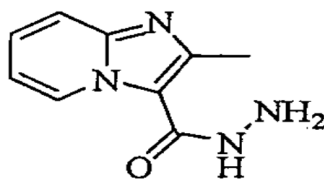
wherein R is -H or -CH₃, -CH₂-COOH; (Please add)

~~Ar is aryl/heteroaryl ring is substituted by mono or di-substituents with nitro, halogen, N,N-dimethyl, cinnamyl, methyl and methoxy groups. or derivatives, metabolites thereof~~

2. The compound of Thiazolidin-3-yl-imidazo-pyridine-3-carboxamide of formula I as claimed in claim-1, wherein the compound is,
- N*-(2-(3-chlorophenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - N*-(2-(3-fluorophenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - N*-(2-(2-hydroxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - N*-(2-(4-hydroxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - N*-(2-(4-hydroxy-3-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - 2-Methyl-*N*-(4-oxo-2-(*o*-tolyl)thiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;

- g. 2-Methyl-*N*-(4-oxo-2-(3,4,5-trimethoxyphenyl)thiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;
- h. *N*-(2-(2-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
- i. *N*-(2-(4-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
- j. 2-Methyl-*N*-(2-(3-nitrophenyl)-4-oxothiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;
- k. 2-Methyl-*N*-(2-(4-nitrophenyl)-4-oxothiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide; and
- l. 2-Methyl-*N*-(4-oxo-2-styrylthiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide.

3. The one-pot synthesis of Thiazolidin-3-yl-imidazo-pyridine-3-carboxamide of formula I as claimed in claim-1 optimizing the in-process isolation of intermediate compounds of formulae IV, III and II in presence of a catalyst

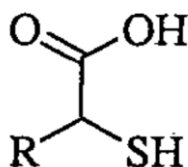


(Formula -IV)

Formula IV;

Ar-CHO

Formula III;



Formula II.

4. The one-pot synthesis of compound of formula 1 as claimed in claim 3
wherein the catalyst is ammonium persulphate (APS).

Dated this 24th day of June, 2023

For,

M K Bhavnagar University, Bhavnagar,

Signature

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Prof. Nisheeth C. Desai

For the Applicant

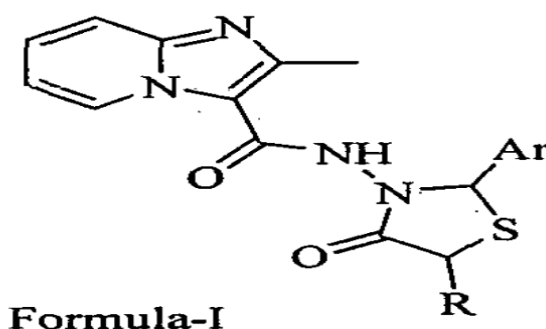
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CLEAN CLAIMS

1. An anti-malarial compound Thiazolidin-3-yl-imidazo-pyridine-3-carboxamide of formula I.

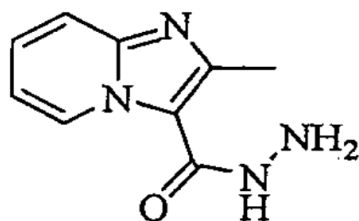


wherein R is -H or -CH₃, -CH₂-COOH;

Ar is aryl ring substituted by mono or di-substituents with nitro, halogen, *N,N*-dimethyl, cinnamyl, methyl and methoxy groups.

2. The compound of Thiazolidin-3-yl-imidazo-pyridine-3-carboxamide of formula I as claimed in claim-1, wherein the compound is,
- a. *N*-(2-(3-chlorophenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - b. *N*-(2-(3-fluorophenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - c. *N*-(2-(2-hydroxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - d. *N*-(2-(4-hydroxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - e. *N*-(2-(4-hydroxy-3-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - f. 2-Methyl-*N*-(4-oxo-2-(*o*-tolyl)thiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;
 - g. 2-Methyl-*N*-(4-oxo-2-(3,4,5-trimethoxyphenyl)thiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;

- h. *N*-(2-(2-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - i. *N*-(2-(4-methoxyphenyl)-4-oxothiazolidin-3-yl)-2-methylimidazo[1,2-*a*]pyridine-3-carboxamide;
 - j. 2-Methyl-*N*-(2-(3-nitrophenyl)-4-oxothiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide;
 - k. 2-Methyl-*N*-(2-(4-nitrophenyl)-4-oxothiazolidin-3-yl)imidazo[1,2-*a*]pyridine-3-carboxamide; and
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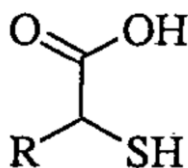


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