(2020) 09 IPAB CK 0003

Intellectual Property Appellate Board, Delhi Registry Cum Bench

Case No: OA/46/2020/PT/DEL

Pharmacyclics, Llc	APPELLANT
Vs	
Controller General Of Patents, Designs Trademarks And Geographical Indications And Ors.	RESPONDENT

Date of Decision: Sept. 29, 2020

Acts Referred:

- Patents Act, 1970 - Section 2(1), 3(d), 8, 11A, 25, 25 (4), 25(2), 25(3), 25(4), 43(2), 64(1), 64(h), 73, 117A
- Patents Rules, 2003 - Rule 55A, 56, 57, 58, 59, 60, 62, 62(1), 62(4), 62(5), 64(2), 129A, 137, 138

Hon'ble Judges: Manmohan Singh, J; Dr. Onkar Nath Singh, Technical Membe

Bench: Division Bench

Advocate: Praveen Anand, Archana Shanker, Dhruv Anand, Devinder Singh Rawat, Udita Patro, Sachin Malik, Rajeswari Hariharan

Final Decision: Allowed

Judgement

Sl No.,Date/Particulars,Actions

1.,12/03/2009,1642/DELNP/2009

2.,APPLICANT NAME,"PHARMACYCLICS, INC.

3.,TITLE OF INVENTION,"""INHIBITORS OF BRUTON'S TYROSINE KINASE

4.,28/12/2006,PCT/US2006/049626

5.,22/09/2006,Priority Date

6.,23/04/2009,REQUEST FOR EXAMINATION DATE

7.,22/05/2009,PUBLICATION DATE U/S. 11A

8.,03/10/2014,PUBLICATION DATE U/S. 43(2)

9.,24/09/2015,Notice of Opposition Form 7 by Opponents

10.,10/11/2015,"Petition u/r 138 by the Patentee for 1 month extension to file reply evidence

11.,23/12/2015,"Petition u/r 60 for leave of Controller to allow filing further evidence

12.,23/12/2015,Reply Evidence by the Patentee

13.,16/11/2017,Hearing Date

14.,07/11/2017,Adjournment filed by the Opponent

15.,26/09/2019,Hearing was re-scheduled

16.,12/09/2019,Further evidence filed by the Opponent

17.,19/09/2019,"Petition u/r 137 to accept further evidence u/r 62(4) and Affidavit by Dr. Boyapati Manoranjan Choudhary

18.,19/09/2019,Adjournment filed by the Patentee

19.,24/09/2019,"Post Grant Further evidence Affidavit by Dr. Boyapati Manoranjan Choudhary

20.,11/10/2019,"Filing miscellaneous petition for dismissal of the documents & evidence filed by opponent under rule 62(4) of the Indian Patent Act.

21.,14/10/2019,"Miscellaneous Petition for rejecting the documents and evidence along with annexures filed by the Opponent under rule 62(4) and deciding it first and appropriate order passed before proceeding to the main matter in the interest of natural justice.

22.,16/10/2019,"Statement and Evidence from Opponent for both petitions

23.,28/10/2019,"Written submissions of the Patentee to Miscellaneous

Petitions

24.,30/10/2019,"Written submissions of the Opponents to Miscellaneous

Petitions

25.,06/11/2019,"Hearing on Miscellaneous Petition allowing the

Opponents request

26.,15/11/2019,"Petition for allowing an Affidavit of Dr. Alexander

Bridges by the Patentee

27.,18/11/2018,Filing Original affidavit of Dr. Alexander James Bridges.

28.,22/11/2019,Hearing Rescheduled date

29.,06/12/2019,"Petition u/r 138 for seeking extension of time for one

week (7 days) to file written submission

30.,09/12/2019,Post-hearing submission by the opponent

31.,09/01/2020,Written Submission by the Patentee

32.,04/03/2020,Decision of the Learned Controller

6.5 Ibrutinib is specifically disclosed as Compound 13 (R)-1-(3-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3, 4-d]pyrimidin-1-yl)piperidin-1-yl)prop-2-",,

en-1-one,,

6.6 The pyrazolo pyrimidine scaffold of Ibrutinib has the following substituents:,,

a. N-1 position with substituted piperidine ring,",,

b. C-3 position with phenoxy phenyl group and,,

c. C-4 position with amino group,,

d. Michael acceptor (-COCH=CH2 group) attached at N-1 position on piperidine ring at the 3rd position,,

6.7 Irreversible and Selective Inhibition:,,

a) In the summary of the invention, the inventors of IN '968 clearly mention that the inhibitors of the present invention relate to irreversible inhibitor of",,

BTK that forms a covalent bond on the cysteine residue of the BTK, that belongs to the Tec family of non-receptor tyrosine kinases",,

b) Para [0138]/[0139] of the patent specification provides definition of irreversible inhibitor/irreversible BTK inhibitor.,,

c) Biological Activity of Ibrutinib-Unexpected/surprising potent irreversible and selective BTK inhibitor Example 2 of the patent specification provides,,

the BTK in vitro inhibitory activity (the biological activity of the compound).,,

d) At para [00410,], the Patentee states as follows:",,

These compounds are highly potent inhibitors of Btk kinase activity with IC50s in the sub-nanomolar to single digit nanomolar range for in vitro kinase",,

activity. Their IC50s in the (Ramos cell) Ca2+ flux assay ranged from 3 to 92nM.""",,

TABLE 2 of IN Patent No. 262968 (compound 13- activity):,,

e) The inventors characterized the properties of the compounds and assessed the selectivity of these compounds for inhibition of Btk versus the,,

protein kinases Lck, Lyn, and Syk [para 00412 of the specification].",,

f) Compound 4 exhibited significant selectivity for Btk in cellular assays over Lck and Lyn kinases. As shown in the patent, compound 4 exhibits a",,

>500-fold selectivity between Btk and Lyn or Syk in cells.,,

TABLE 3 of IN Patent No. 262968:,,

6.8 The appellant has also informed that corresponding patents have been granted in over 87 countries and is not revoked or invalidated in any,,

jurisdiction. Additionally, Ibrutinib is the first of its kind irreversible BTK inhibitor to be approved by any regulatory agency in the world.",,

7. The appellant has submitted this appeal on the following grounds:,,

7.1 Because Respondent No. 2 completely disregarded the directions of the Hon'ble High Court issued in W.P.(C) No. 12105/2019 dated 20th,,

November 2019 wherein the Hon'ble High Court in Para 33 directed the Respondent no. 2 to ensure that the members of the Opposition Board are,,

present at the hearing in order to ensure that the new document/evidence is discussed in the presence of the Opposition Board.,,

7.2 Because Respondent No. 2 miserably erred in not sending the new documents and fresh evidence to the Opposition Board for fresh Opposition,,

Board recommendations.,,

7.3 Because Respondent no. 2 without providing in reason whatsoever simply disregarded the recommendations of the Opposition Board particularly,,

in relation to inventive step and in one stroke disregarded the recommendations of the Opposition Board.,,

7.4 Because Respondent no. 2 ignored the well settled principle for obviousness determination which is a mixed question of law and fact.,,

7.5 Because the Respondent No. 2 ignored the evidence filed by the Appellant and instead passed the impugned order on inventive step on his,,

common understanding of the documents and evidence"" without making any reference to the evidence filed by the parties.",,

7.6 Because the Respondent No. 2 has erred in not referring/relying on the evidence of parties, evidence of Mr. CH. V. Ramana Rao, Dr. B.M.",,

Choudhary and two evidences affidavit of Dr. Alex Bridges.,,

7.7 Because Respondent no. 2 at page 46 stating the following ""I have considered the written submissions, and captured all the issues stated by",,

experts of both the sides"".",,

7.8 Because Respondent No. 2 erred in basing his decision on the written submissions filed by the Respondent No. 3 and completely ignored the,,

submissions made by the Appellant.,,

7.9 Because Respondent no. 2 while ignoring the presentation made by the Respondent no. 3 at the hearing, surreptitiously included all the information",,

provided by Respondent no. 3 through their presentation in the written submissions, which now forms a part of the impugned order.",,

7.10 Because Respondent No. 2 failed to decide the preliminary issues that have been raised by the Petitioner, before deciding the main issue, despite",,

the oral directions of the Hon'ble High Court.,,

7.11 Because Respondent No. 2 clearly erred in not deciding/adjudicating upon the preliminary objections taken by the Appellant at the hearing,,

namely:,,

a) That evidence cannot travel beyond the material facts pleaded and in the present proceedings, the evidence of Dr. B.M. Choudhary ought not to",,

have been entertained as it was clearly beyond the pleadings/written statement filed in the post grant opposition.,,

b) The Respondent No. 3 clearly ignored Rule 57of the Indian Patent Rules and the principle of Law of pleadings and evidence. Rule 57 requires the,,

written statement to include at least the following:,,

(i) The nature of Opponent's interest,,

(ii) The facts upon which the Opponent based their care and,,

(iii) The relief that the Opponent seeks,,

c) Respondent No. 2 erred in taking on record the evidence of Mr. Ramana Rao as he is not an independent expert but an office bearer of the,,

company.,,

7.12 Because the Respondent No. 2 failed to determine and adjudicate as to whether Dr. B.M. Choudhary is a person skilled in the art for an,,

obviousness enquiry.,,

7.13 Because, Respondent No. 2 erred in not defining or identifying the test applied for obviousness analysis",,

7.14 Because Respondent No. 2 before embarking on inventive step analysis failed to define the skills of a person skilled in the art.,,

7.15 Because Respondent No. 2 erred in appreciating the evidence of Dr. Alex Bridges as well as the details provided in the patent specification that,,

clearly recognize that BTK and LCK are different kinases and there is no similarity in the two kinases whatsoever.,,

7.16 Because the Respondent No. 2 has erred in coming to a conclusion that that BTK and LCK are homologous and inhibitors of LCK are also,,

expected to inhibit activity of BTK as well.,,

7.17 Because Respondent No. 2 for treating LCK and BTK kinase homologous, errs in treating Andrew et al and other references as",,

relevant/analogous art"".",,

7.18 Because Respondent No. 2 has failed to appreciate that connation of the expression of 'Btk tyrosine kinase cysteine homologs' used in paras 5/39,,

of the patent specification and comes to comes to an erroneous finding that the prior art document for LCK or any other tyrosine kinase would behave,,

similarly, in BTK as well and states that 'LCK and BTK are not related and that all prior art regarding LCK must be rejected is not fully correct'.",,

7.19 Because Respondent no. 2 erred in extrapolating that crystal structure BTK and LCK are similar based on prior art US'851 and Chen et. Al and,,

failed to appreciate that the documents US '851 and Chen et al, discloses that the three-dimensional or confirmation of the enzyme BTK and LCK are",,

different.,,

7.20 Because the Respondent No. 2/Learned Controller has erred in interpreting the Fig. 3 of Chen et. al.,,

7.21 Because Respondent no. 2 erred in interpreting the Btk tyrosine kinase cysteine homologs as per the patent specification and understanding the,,

differences between Btk and Lck as stated in affidavit by Dr. Bridges, Chen et al. and US 851",,

7.22 Because the findings of Respondent No. 2 in his inventive step analysis is incorrect on facts as he has made major scientific errors which were,,

neither argued at the hearing, present in the hearing submissions nor in the evidence of their experts.",,

7.23 Because Respondent No. 2 in the absence of any evidence and without defining POSA has erred in arriving to a conclusion in relation to Andrew,,

et al that a person skilled in the art when preparing a new compound would look for similar Nitrogen based heterocyclic groups which is structurally,,

similar to cyclohexyl group and that could similarly occupy the ribose pocket as N-methyl piperazine.,,

7.24 Because Respondent No. 2 in the absence of any evidence or pleadings came to a conclusion at page 40 of the impugned order ""In chemistry,",,

there are only few aza-heterocyclic groups and piperidinyl is not uncommon."""",,

7.25 Because Respondent No. 2 in the absence of any pleadings/evidence/written submissions has erred in coming to a conclusion that it is common,,

knowledge that piperidinyl group is closely similar to cyclohexyl group which was already present in the compound of Andrew et al.,,

7.26 Because Respondent No. 2 in the absence of any pleadings/evidence/written submissions has erred in coming to a conclusions that,,

There is piperidine group which is found within the compounds made in other prior arts which also are of Abbott. Piperidinyl group is a smaller group,,

(page 40 of the order).,,

Cyclohexyl N-methyl piperizine is structurally and functionally similar to nitrogen based heterocyclic group, piperidine which is a natural choice made",,

from various existing alternatives.,,

7.27 Because Respondent No. 2 erred in stating ""a POSA would replace cyclohexyl-N-methyl piperazine with piperidinyl group...It is not stated that",,

this step is not technically impossible or if such step is taken then no anti-tyrosine kinase activity will come""",,

7.28 Because Respondent No. 2 erred in stating that no arguments were made by the Patentee doubting the substitution of phenoxy phenyl group at,,

the 3rd position of compound 2 of Andrew et al is incorrect.,,

7.29 Because Respondent no. 2 has erred in applying the teaching of the prior art document that relate to LCK inhibitors/different kinase family to the,,

compounds disclosed in IN968 which is irreversible BTK inhibitors.,,

7.30 Because Respondent no. 2 erred in completely disregarding the fact that as on the priority date of the invention BTK was not validated target for,,

a drug discovery program.,,

7.31 Because Respondent no. 2 failed to appreciate the teaching of the prior art relied upon by Respondent no. 3 in relation to the Abbott references,,

7.32 Because Respondent no. 2 erred in arbitrary selecting WO 868 and Andrew et. al. from the Abbott references to show the importance of a,,

phenoxy phenyl substitution at the third position of the pyrazolo-pyrimidine ring. This is in fact contrary to the principles of inventive step as hindsight is,,

impermissible.,,

7.33 Because the entire analysis of Respondent no. 2 for inventive step was done in hindsight and arbitrary selected a compound with piperidine group,,

from WO 868, despite the lead compound in WO 868 was example 3.",,

7.34 Because, the Respondent No. 2 does not even identify the compound from WO'868 to complete his analysis and instead makes a sweeping",,

statement to read as follows at page 40 of the impugned order:,,

'Piperidinyl group seems to be frequently used in the prior art as in WO'868',,

7.35 Because, the Respondent No. 2 ignores the compounds selected by the Respondent No. 3 in their written statement and by their expert from WO",,

868 at page 1816 which does not have a piperidinyl ring.,,

7.36 Because, the Respondent No. 2 does not provide any reason for arbitrary selection of compounds from WO'868 (in the absence of biological",,

data) and ignores the best compound, example 3",,

7.37 Because Respondent no. 2 has provided no reasoning whatsoever as to why a person skilled in the art would be motivated to attach a Michael,,

acceptor from Robert Copeland et. al. to hypothetical compound (which the Respondent no. 2 has not even referred to in the impugned order) from,,

Andrew et. al. and other prior art references.,,

8. The opponent expresses their case as follows:,,

8.1 The opponent rebuttal to the arguments of the appellant is as under:,,

8.2 The argument that the Learned Controller got mixed up between LCK and BTK enzymes; LCK is not a homologue of BTK. LCK has no,,

cysteine;,,

It is submitted that as stated in the foregoing paragraphs, LCK and BTK share certain homology. There are certain domains, especially the ATP",,

binding domain, is common to LCK and BTK enzymes. The BTK inhibitor of the invention of IN'968 is to target that particular ATP binding domain.",,

Therefore, any inhibitor of LCK would act as an inhibitor of BTK to that extent. This is also admitted by the Patentee/Appellant in their own patent",,

(para 00412 and para 25 and Figure 1). It is entirely irrelevant that LCK has no cysteine residue. The main binding domain is the ATP binding domain,",,

which is common to LCK and BTK enzymes. Even the experts of the Appellant do not deny this fact.,,

In fact the Appellant has tested their compounds against LCK - table 5;,,

Further, the Appellant has acknowledged in their specification about the paper by Andrew et al 2002 (pg 36 PARA 219).",,

All this shows that certainly LCK and BTK are closely related at least to the extent of the portions where the enzyme has a pocket for ATP,,

occupation. To that extent, all prior art relating to LCK are relevant for BTK as the ATP binding pocket is the same and the inhibitor would act in the",,

same way as it does in case of LCK,,

8.3 Learned Controller has mixed up between receptor tyrosine kinase and non-receptor tyrosine kinase. Prior art is only about LCK or EGFR, both of",,

which are non-receptor tyrosine kinase. The Learned Controller has taken prior art relating to LCK and EGFR and declared that the invention is,,

obvious. The Learned Controller has used non-analogous prior art;,,

It is submitted that non-analogous prior art is that prior art which relates to a complete different field as compared to the field of the invention. The,,

main test to decide whether prior art is analogous or non-analogous is whether there is a relationship that can be established between the prior art and,,

the invention. [In re Alberto Bigio 382 F3d 1320],,

There are many reasons why any prior art relating to LCK cannot be considered as non-analogous prior art, including that:",,

(i) LCK and BTK both relate to tyrosine kinase enzymes. Tyrosine kinase enzymes are involved in mediating cancer cells. Being from the same,,

family of enzymes and targeting the same disease, this cannot be said to be non-analogous;",,

(ii) Person skilled in the art such as other authors in the field and working on kinase enzymes never considered LCK and BTK to be non-analogous or,,

unrelated to each other. Example is Chen et al;,,

(iii) In case the LCK and BTK are unrelated, there is no reason for the Appellant to test and prove the efficacy of BTK against LCK;",,

8.4 Learned Controller holds that cyclohexane and piperidine are the same, which is against basic chemistry;",,

It is submitted that the order of the Learned Controller is to be read in its entirety. Selective reading would obviously lead to absurd results and absurd,,

conclusions. At pages 170-173, the Learned Controller deals with the substitution at the first position of the pyrazolopyrimidine core. The Ld. Learned",,

Controller has gone through Andrew et al and appreciated the experiments and tests done by Andrew et al., which lead to the conclusion that N-",,

methyl piperazine is an important group at first position of the pyrazolopyrimidine core.,,

It was argued by the Appellant that Andrew discloses cyclohexyl group at said first position, to which N-methyl piperazine is appended and that this",,

group is not similar to ibrutinib which has piperidinyl group at the same position. It was argued that there is no reason for such replacement. In this,,

context, the Ld. Learned Controller appreciate that there are certain compounds in WO'868 which have piperidinyl group appended to first position.",,

It is in this context that the Ld. Learned Controller states that such piperidinyl group is obviously similar to the cyclohexyl group which is present in,,

Andrew et al. Here, cyclohexyl N-methylpiperazine has been shortened to just 'cyclohexyl', which is a short form reference of the long name of the",,

group. It is not to be treated as an error. Later on the same page, the Ld. Controller correctly states that ""apart from doubting whether a POSA would",,

replace cyclohexyl-N-methyl piperazine with piperidinyl group, I have not seen any other specific reason from the patentee why a POSA would not",,

take this obvious step. It is not stated that this step is not technically impossible or if such step is taken then no anti-tyrosine kinase activity will come"".",,

Therefore, this argument is entirely misconceived and results from selective reading of the order.",,

8.5 The Learned Controller takes LCK prior art plucks out a compound, removes certain portions without logic and then patches it with certain other",,

prior art in order to somehow arrive at Ibrutinib. Only through hindsight, the Learned Controller has been able to arrive at Ibrutinib;",,

It is submitted that there is no patch work compound made by the Learned Controller. The Learned Controller is following logically what is stated in,,

the prior art. The Learned Controller has read the prior art collectively as a person skilled in the art would do.,,

8.6 Evidence of Mr. Raman Rao being from the Company, is biased, cannot be relied upon:",,

In this regard it is submitted that under the Evidence Act, there is no bar for a person working in a company to give oral evidence of a fact of which",,

he has knowledge or experience. In this case, the issues of development of compounds, evaluation of prior art etc are matters that are handled by Mr.",,

Rao with the Respondent company.,,

In case there is any doubt on the evidence tendered by Mr. Rao, the appropriate course of action would be to cross examine the witness. Instead the",,

Appellant has chosen to criticise the witness The practice of employees giving evidence is also prevalent in Europe - where the Board of Appeals has,,

had the occasion to rule on this issue (T327/91),,

Thus, it is settled law that employees may give evidence and the same cannot be disqualified on account of 'perceived bias'",,

8.7 EVIDENCE CANNOT TRAVEL BEYOND PLEADINGS:,,

It was sought to be argued that the Learned Controller had considered all the evidence of the Respondent which was beyond pleadings - it was argued,,

that there is no reference to Michael acceptor, to Andrew et al as closest prior art, or that LCK is a BTK homologue.",,

This argument is entirely misconceived because:,,

(i) This plea is firstly not available to the Appellant at this stage since this plea was taken up in the writ petition no. 12105/2019 filed before the Delhi,,

High court; the Hon'ble Court considered the issue and held that all the evidence of both parties shall be considered by the Ld Controller who shall,,

pass an order after hearing the parties;,,

(ii) Thus, on the ground of constructive res judicata, the plea of evidence being beyond the pleadings is no longer available to the Appellant since the",,

plea was raised in the said Writ Petition, whether decided or not and now it would be presumed that the plea has been declined. Reliance is placed on",,

Jhalani Tools V. Union of India (1994) and Forward Construction V. Prabhat Mandal,,

(iii) Without prejudice to the above, it is submitted that:",,

â€¢ The opposition was based on the patent as granted.,,

â€¢ In the reply statement filed to the Opposition, the Appellant pitched their case higher than in the patent/interpreted their patent differently and",,

raised several new grounds;,,

â€¢ For the first time, it was stated by the Appellant that presence of a phenoxy-phenyl group on the pyrazolo-pyrimidine core ring, the pyrazolo-",,

pyrimidine and presence of Michael acceptor was inventive.,,

â€¢ Therefore, the Respondent filed further or additional evidence as provided for in law; under rule 62(4);",,

â€¢ Therefore no new case was made out by the Respondent-it was a case to meet the new interpretation of the patent as spelt out by the Appellant,,

â€¢ Such evidence was already permitted to be taken on record and adjudicated by the Hon'ble Court vide order 22/11/2019;,,

â€¢ Hence this issue does not survive at all,,

8.8 SMALL CHANGE IN CHEMICAL STRUCTURE LEADS TO UNPREDICTABLE RESULTS,,

All chemical substances are built on using a common core - it is this core that provides the intended effect; therefore compounds having similar core,,

have similar properties. E.g. any and all compounds of the prior art documents as well as of the specification with 4-aminopyrazolopyrimidine chemical,,

structure have same effects. This contradicts the specification of the impugned patent which embraces thousands of compounds having similar core,,

but several other substituents and having the same property.,,

8.9 OBVIOUSNESS ANALYSIS IS THROUGH THE EYE OF A PERSON OF ORDINARY SKILL IN THE ART,,

As per Section 64(1)(e) read with Section 2(1)(j)(a), inventive step is a feature of an invention that involves a technical advance and which is not",,

obvious to a person skilled in the art. It is pertinent to note that the legislature has used the term ""person skilled in the art"" and not the term ""person of",,

ordinary skill in the art"". On the other hand, with respect to Section 64(1)(h), the legislature has used the term ""Person in India possessing average skill",,

and average knowledge of the art"". Therefore, it is clear that the legislature has used different terms for different provisions and the same must be",,

given effect in the matter used by the legislature. One has to harmoniously read the statute and if there are two different types of skilled in person,,

contemplated in the Act for different activities, it must be so implemented. In conclusion, an invention must not be obvious to a person skilled in the art.",,

Such person skilled in the art is a hypothetical person having certain attributes as decided in the case of Sankalp Rehabilitation Trust Vs. Hoffman La,,

Roche - He is not a dullard.,,

8.10 LEARNED CONTROLLER DID NOT APPLY THE CORRECT TEST OF OBVIOUSNESS AS IN ROCHE V. CIPLA,,

The Ld. Controller applied the test of obviousness as set out in Bishwanath Prasad case, which is a kin to the test set out in Roche Vs. Cipla. No fault",,

can be found with the Learned Controller for applying such test.,,

8.11 LEARNED CONTROLLER IGNORED THE DIRECTION OF THE ABBOTT REFERENCES,,

The Abbott references are to be read with all the other prior art which suggest that pyrrazolo pyrimidine structures are to be considered for treatment,,

of tyrosine kinase disorders.,,

8.12 ANDREW ET AL TEACHES AWAY FROM USING CYCLOHEXYL N-METHYL PIPERAZINE,,

Andrew et al teaches cyclohexyl N-methyl piperazine but concludes that N-methyl piperizine is good for oral dosing of the compound i.e. N-methyl,,

piperizine is a better substitute for cyclohexyl N-methyl piperazine.,,

The Learned Controller has quoted from Andrew that,,

Our results also indicated that an appended solubilizing heterocycle in the ribose pocket, such as the N-methyl piperazine in 1, facilitated oral dosing""",,

Further to this the Learned Controller has stated that ""The inference that presence of N-methyl piperizine at 1st position would be sufficient to",,

facilitate oral dosing and enabling efficacy of the compound cannot be ignored""",,

Therefore, the Learned Controller has relied on the conclusion stated by Andrew and further to that the Learned Controller has stated that a person",,

skilled in the art looking for a substitute of N- methyl piperazine will choose similar six membered Nitrogen containing group such as piperidine, which",,

was exemplified in other prior art documents. Hence, effectively a person skilled in the art looking to replace cyclohexyl N-methyl piperazine will find",,

piperidine to be a suitable alternative. This is suggested by the prior art references.,,

Additionally, it is to be noted that the Appellant in their own specification has made a specific reference to Andrew et al 2002, the paper cited by the",,

Respondent at pg 38 para 219 stating that the compounds of the invention can be prepared by methods known in the art including the methods of,,

Andrew et al,,

For the doctrine of teaching away to apply, there must be a specific negative teaching in the prior art. No such teaching can be found.",,

8.13 NO REASON TO INCLUDE MICHAEL ACCEPTOR,,

In this regard it is submitted that the paper by Robert Copeland et al shows that in order to make compounds that are irreversible inhibitors, it is",,

necessary to add an electrophilic group such as vinyl ketone. The addition of the group has been tested on two compounds that are in the clinical trials,,

and there is no reason to ignore this piece of art. This in fact is the direction to be followed, and it has been followed by the Inventors of the impugned",,

patent. Thus, performing a routine step in a manner known in the art is obvious -i.e. applying known solution to a problem in a known manner - KSR",,

Vs. Teleflex.,,

8.14 COMMERCIAL SUCCESS,,

It is submitted that Commercial success in respect of an invention can come about due to various reasons including good marketing techniques.,,

Therefore this factor is not determinative of whether the invention is obvious or not. The test is whether the invention is technically obvious. Hallen Co,,

v. Barbantia (UK) Ltd. [1991] RPC 195.,,

8.15 THE ARGUMENT THAT THE RECOMMENDATION OF THE OPPOSITION BOARD WAS IGNORED BY THE LEARNED,,

CONTROLLER WITHOUT ASSIGNING ANY REASON IS ALSO MISPLACED,,

The relevant provisions in the Patents Act, 1970 and the Patent Rules, 2003 dealing with the recommendation of the Opposition Board are as follows:",,

Section 25 (4): On receipt of the recommendation of the Opposition Board and after giving the patentee and the opponent an opportunity of being,,

heard, the Learned Controller shall order either to maintain or to amend or to revoke the patent.",,

Rule 56 (4). The Opposition Board shall conduct the examination of the notice of opposition along with documents filed under rules 57 to 60 referred,,

to under sub-section (3) of section 25, submit a report with reasons on each ground taken in the notice of opposition with its joint recommendation",,

within three months from the date on which the documents were forwarded to them.,,

Rule 62 (5). After hearing the party or parties desirous of being heard, or if neither party desires to be heard, then without a hearing, and after taking",,

into consideration the recommendation of Opposition Board, the Learned Controller shall decide the opposition and notify his decision to the parties",,

giving reasons therefor.,,

It is settled law that the recommendations of the Board are not binding, are merely recommendatory in nature. In view of Section 25(3) as well as",,

Rule 56, the recommendation of the Opposition Board is a mere recommendation and is not binding on the Ld. Learned Controller, who is free to",,

adjudicate the matter on its own merits, independent of the recommendations of the Board.",,

Further, the members of the Board who gave the recommendations were also present at the hearing and the Ld. Controller passed the order in due",,

consultation with these members; hence, the members of the Board as well as the Ld. Controller had applied their mind to the matter while coming to",,

a conclusion with regard to lack of novelty as well as lack of inventive step;,,

8.16 Reasons for differing with the Board: The Impugned Order clearly states that 'I do not agree with the recommendations of the opposition Board'.,,

The Ld. Controller is a technical domain expert, whose orders and judgments may not be in the same lucid and elaborate manner as that of the High",,

Court or Supreme Court. Further, the scheme of the Patents Act and the rules makes it clear that the Learned Controller is not mandated to assign",,

reasons for disagreeing with the recommendation of the Opposition Board; reasons are however mandatory in support of the final decision regarding,,

continuation or revocation of a patent under Section 25 read with Rule 62.,,

These orders are bound to be precise and lacking in trappings of refined language and finesse of a Court. The orders are therefore to be read not with,,

the strict lens as one would read a statute book, but with certain understanding of the circumstances as well as the evidence that was presented to the",,

Ld. Controller;,,

Therefore, specifying of detailed reasons against the recommendation of the Opposition Board would have been an empty formality because the",,

Opposition Board has merely taken from the arguments of the Patentee. This contention would have been meritorious only if the Opposition Board,,

had done some analysis of the contention of Respondent No. 3 and then rejected it. The Impugned Order, in effect, negatives and dismisses all the",,

arguments contained in the recommendation of the Opposition Board in support of the recommendation that the post grant opposition be dismissed.,,

The argument that all the members of the Opposition Board should have been present at the hearing is entirely untenable because the scheme of the,,

Patents Act does not contemplate that all the members of the Board should be present necessarily at the hearing. The Board after giving its opinion,,

becomes functus officio and has no role to play. Even if the members were required and not present, it is a mere irregularity.",,

9. Analysis,,

9.1 Scheme of Post-Grant Opposition at Indian Patent Office (IPO),,

9.2 For proper understanding of the scheme lets quote the relevant provisions of the Patents Act, 1970 and the Rules made thereunder:",,

CHAPTER V1",,

OPPOSITION PROCEEDINGS TO GRANT OF PATENTS,,

Section 25,,

Opposition to the patent,,

(3) (a) Where any such notice of opposition is duly given under sub-section (2), the Controller shall notify the patentee.",,

(b) On receipt of such notice of opposition, the Controller shall, by order in writing, constitute a Board to be known as the Opposition Board consisting",,

of such officers as he may determine and refer such notice of opposition along with the documents to that Board for examination and submission of its,,

recommendations to the Controller.,,

(c) Every Opposition Board constituted under clause (b) shall conduct the examination in accordance with such procedure as may be prescribed.,,

(4) On receipt of the recommendation of the Opposition Board and after giving the patentee and the opponent an opportunity of being heard, the",,

Controller shall order either to maintain or to amend or to revoke the patent.,,

9.3 Before we go for the detailed discussion on the procedures to be followed while disposing a post grant opposition, let's discuss the provisions by",,

which the Board is constituted and the mandate of the opposition board as envisaged in section 25(3) (b) and (c) of the Patents Act 1970.,,

9.4 Rules 56 provides for the procedures of constitution and proceedings of the opposition board. It reads as follows:,,

Rule 562",,

Constitution of Opposition Board and its proceeding,,

(1) On receipt of notice of opposition under rule 55A, the Controller shall, by order, constitute an Opposition Board consisting of three members and",,

nominate one of the members as the Chairman of the Board.,,

(2) An examiner appointed under sub-section (2) of section 73 shall be eligible to be a member of the Opposition Board.,,

(3) The examiner, who has dealt with the application for patent during the proceeding for grant of patent thereon shall not be eligible as member of",,

Opposition Board as specified in sub-rule (2) for that application.,,

(4) The Opposition Board shall conduct the examination of the notice of opposition along with documents filed under rules 57 to 60 referred to under,,

sub-section (3) of section 25, submit a report with reasons on each ground taken in the notice of opposition with its joint recommendation within three",,

months from the date on which the documents were forwarded to them.""",,

[Emphasis Added],,

9.5 It is very important to note that opposition board is suppose to conduct examination of the notice of opposition along with documents filed under,,

rules 57 to 60 referred to under sub-section (3) of section 25. Hence let's look at the provisions of Rules 57-60 and later Rule 62 as well.,,

Rule 573,,

Filing of written statement of opposition and evidence,,

The opponent shall send a written statement in duplicate setting out the nature of the opponent's interest, the facts upon which he bases his case and",,

relief which he seeks and evidence, if any, along with notice of opposition and shall deliver to the patentee a copy of the statement and the evidence, if",,

any.,,

Rule 584,,

Filing of reply statement and evidence,,

(1) If the patentee desires to contest the opposition, he shall leave at the appropriate office a reply statement setting out fully the grounds upon which",,

the opposition is contested and evidence, if any, in support of his case within a period of two months from the date of receipt of the copy of the written",,

statement and Opponent's evidence, if any by him under rule 57 and deliver to the opponent a copy thereof.",,

(2) If the patentee does not desire to contest or leave his reply and evidence within the period as specified in sub-rule (1), the patent shall be deemed",,

to have been revoked.,,

Rule 595,,

Filing of reply evidence by opponent,,

The opponent may, within one month from the date of delivery to him of a copy or the patentee's reply statement and evidence under rule 58, leave at",,

the appropriate office evidence in reply strictly confined to matters in the patentee's evidence and shall deliver to the patentee a copy of such,,

evidence.,,

Rule 605,,

Further evidence to be left with the leave of the Controller,,

No further evidence shall be delivered by either party except with the leave or directions of the Controller:,,

Provided that such leave or direction is prayed before the Controller has fixed the hearing under rule 62.,,

Rule 615,,

Copies of documents to be supplied,,

(1) Copies of all documents referred to in the notice of opposition or in any statement or evidence filed in connection with the opposition and,,

authenticated to the satisfaction of the Controller, shall be simultaneously furnished in duplicate unless the Controller otherwise directs.",,

(2) Where a specification or other document in a language other than English is referred to in the notice, statement or evidence, an attested translation",,

thereof, in duplicate, in English shall be furnished along with such notice, statement or evidence, as the case may be.",,

Rule 625,,

Hearing,,

(1) On the completion of the presentation of evidence, if any, and on receiving the recommendation of Opposition Board or at such other time as the",,

Controller may think fit, he shall fix a date and time for the hearing of the opposition and shall give the parties not less than ten days' notice of such",,

hearing and may require members of Opposition Board to be present in the hearing.,,

(2) If either party to the proceeding desires to be heard, he shall inform the Controller by a notice along with the fee as specified in the First Schedule.",,

(3) The Controller may refuse to hear any party who has not given notice under sub-rule (2).,,

(4) If either party intends to rely on any publication at the hearing not already mentioned in the notice, statement or evidence, he shall give to the other",,

party and to the Controller not less than five days' notice of his intention, together with details of such publication.",,

(5) After hearing the party or parties desirous of being heard, or if neither party desires to be heard, then without a hearing, and after taking into",,

consideration the recommendation of Opposition Board, the Controller shall decide the opposition and notify his decision to the parties giving reasons",,

therefor.,,

9.6 Rule 60 brings an end to filing any further evidence without the leave of Controller when it says ""No further evidence shall be delivered by either",,

party except with the leave or directions of the Controller and its proviso which is very important prescribes that such leave or direction is prayed,,

before the Controller has fixed the hearing under rule 62.,,

9.7 Therefore, it is very clear that whatever evidence need to be filed by either party; whether as per Rules 57-59 or with leave of Controller under",,

Rule 60, must be filed prior to the date when the Controller has fixed the hearing under rule 62. It is implied that after the date of hearing is fixed no",,

evidence by either party is admissible as per the provisions of the Patents Act and the Rules made thereunder.,,

9.8 Now the question here is what if the hearing is re-fixed to some other date? The Patents Rules under Rule 129A provides adjournment of hearing,,

for a maximum of two times with payment of the prescribed fees. Whether the date so rescheduled to be taken into for the purpose of Rule 60? The,,

answer is NO. As, when the Controller fixed the first hearing, he/she was already in possession of the recommendation of the opposition board,",,

constituted under the provisions of the Acts and Rules, which has already examined the available statements and evidences presented by either party",,

and as per the Act or Rules, the opposition board has no further opportunity to examine the further filed documents any more. In Harmacyclics LLC6,",,

Hon'ble High Court of Delhi vide their order dated 20th November, 2019, also held that fixing the hearing under Rule 62 is only the First notice of",,

Hearing.,,

9.9 We would further like to emphasis here is that the Patents Act is a Special Act. The provisions are mandatory in nature. The Code of Civil,,

Procedure, 1908 and Evidence Act are not applicable. General principles are to be followed. As per Rules, once the procedure of tendering the",,

evidence is complete up to Rule 60, no further/additional evidence can be brought on record by any party except publication which are in public",,

domain being small window available under Rule 62(4). For the same, 5 days notice before the date is necessary. If no notice is given, even",,

publication may not be considered by the Controller once the hearing is fixed under rule 62(1) of the Rules. No party is entitled to misuse the Rule,,

62(4) otherwise. The Patents Act, 1970, being a Special Act, we are of the opinion that the said rules are to be followed strictly because of the",,

reasons as valuable rights of the parties are involved.,,

9.10 The Following is the graphic presentation of the provisions of Rules 57-60 & 62(4) of the Patents Rules, 2003. It will also prove to be illustratively",,

helpful in understanding the provisions of the Rules relating to post grant opposition:,,

Fig: 1,,

9.11 A plain reading of the relevant provisions of the Act and Rules, it will be very clear that scheme of post -grant opposition requires a two-tier",,

decision making process wherein the members of the opposition board under a chairman examines all the statements and evidences and submits its,,

recommendation to the Controller. The statue under section 25(4) is specific that ""On receipt of the recommendation of the Opposition Board and",,

after giving the patentee and the opponent an opportunity of being heard, the Controller shall order either to maintain or to amend or to revoke the",,

patent."" Further a look at the provisions of Rule 62(5) ""After hearing the party or parties desirous of being heard, or if neither party desires to be",,

heard, then without a hearing, and after taking into consideration the recommendation of Opposition Board, the Controller shall decide the opposition",,

and notify his decision to the parties giving reasons therefor. [Emphasis added],,

9.12 Therefore, it is evident that once the recommendation of the opposition board is in hand, the Controller is better equipped to hear the matter and",,

decide it. Here, it is never inferred that such recommendation is binding on the Controller. But it is mandatory for the Controller to take the",,

recommendation of the opposition board into consideration. In either case of his agreement or disagreement his clear view is required to be annotated.,,

If this is not happening then the whole spirit of the law, having double check, is likely to lose its meaning.",,

9.13 In this particular case as the sequence of events so suggests a number of documents have been placed on records under Rule 62(4) by the,,

opponent. The patentee also filed their rebuttal thereafter. This is not the spirit of the Rules. If the legislatures thought that the ""publication"" proposed",,

to be relied by either parties has evidentiary value, then why it restricted the scope to the opposition board to only the documents submitted under",,

Rules 57-60. They should have easily included Rule 62(4) as well. But the intension of the legislature is clear that these documents were never thought,,

of carrying such evidences which were required to be examined for its veracity and merit by the opposition Board. It was thought for publically,,

available ""publication"" not requiring the examination of opposition board. Now, under the guise of ""publication"" Rule 62(4), if any party submits",,

voluminous document having evidentiary value, such ""publications"" do not deserve consideration on two counts first it is violative of Rule 60 and",,

secondly it escapes the examination by the opposition Board.,,

9.14 Further Hon'ble High Court of Delhi in W.P.(C) 12105/20194 has formulated a Guideline on this issue and we are inclined to incorporate the,,

same for reference:,,

9.15 ""39. Therefore, the following general principles ought to be followed while dealing with a post-grant opposition:",,

i) The Opponent and the Patentee have adequate freedom to file their initial pleadings and evidence by relying upon all the documents and expert,,

testimonies that they wish to;,,

ii) The Opponent in Rule 59 ought to be strictly confined to the Patentee's evidence.,,

iii) Once the Opposition Board is constituted and the material is transmitted to the Board, further evidence is not permissible;",,

iv) Under Rule 60, if any further evidence comes to light which either party wishes to rely upon, the same can only be done prior to the issuance of",,

notice of hearing, with the leave of the Controller;",,

v) Under Rule 62(4), only publicly available documents i.e. publications, can be considered provided they are served to the opposing party, five days",,

prior to the hearing and the date/time of the publications as also the relevant portions are highlighted, so that the opposite side can deal with the same",,

at the time of hearing. Any document the authenticity of which is in doubt would not be entertained;,,

vi) The hearing, in the opposition would be usually granted upon request and Opposition Board Members may also be present in order to elicit their",,

views and assist the Controller in deciding the post-grant oppositions.,,

40. In this background, the last question that arises is whether, if a hearing is adjourned, further evidence ought to be permitted or not prior to the next",,

hearing. Clearly from the scheme of the Act, filing of further evidence would not be permissible after the first notice of hearing is issued. Thus, in",,

terms of Rule 60, the hearing as contemplated in the said Rule would be the first notice of hearing. Such an interpretation would ensure that parties do",,

not unduly delay the hearing of oppositions by seeking adjournments and utilising the adjourned period to dig up more evidence, especially as such",,

evidence would in any case have not been considered by the Opposition Board.,,

41. The filing of further evidence prior to the hearing or reliance on publications under Rule 62(4) would not ordinarily permit an adjournment of the,,

hearing. In the Controller's discretion, within a reasonable time, parties may be permitted to support their oral arguments with written submissions",,

which would again be transmitted simultaneously and would not again be treated as documents to which responses can be filed.,,

42. Though the Rule does not stipulate any timelines for fixing the date of hearing, considering that patent rights have a limited term, the Opposition",,

Board ought to give its recommendations within three months after the final Opponent's rejoinder is received under Rule 59. After the receipt of the,,

recommendations of the Opposition Board, a hearing ought to be fixed within three months thereafter. An endeavour ought to be made by the Patent",,

Office to ensure that post-grant oppositions are decided expeditiously as pendency of post-grant oppositions delays adjudication of infringement suits, if",,

any, in respect of the patent and also keeps the rights of the Patentee under a cloud or in doubt."""",,

9.16 The Court further in para 44 of its order directed that: ""For future, the conduct of post-grant oppositions by the Patent office shall be in",,

accordance with the procedures laid down herein. Long pendency of post-grant oppositions can have a cascading effect as it raises a question mark,,

over the validity of the grant of the patent and could also severely delay adjudication of suits for infringement of patent, licensing and other forms of",,

monetization of the patent as the overall term of patent is non-extendable i.e. 20 years. Following the above stipulated procedure would obviate delays,,

in the adjudication of the same.,,

9.17 It is, therefore, re-iterated that in view of the discussions in foregoing paragraphs and also in view of the directives of the Court, the post grant",,

opposition shall be dealt in the like manner. The office of the Learned Controller may incorporate these Guidelines in the Manual of Patent office,,

Practice and Procedure for better compliance.,,

9.18 So far this case is concerned, the Court left to the discretion of the Controller as it puts ""Thus, this Court does not deem it appropriate to direct",,

non-consideration of the said further evidence filed by the parties. The decision would now be rendered by the Controller after taking into,,

consideration all the pleadings, documents and evidence including the additional evidence filed by the parties on record."""",,

9.19 The appellant has raised as issue of non-presence of members of opposition board during hearing and takes plea of oral order of the Court. It,,

appears that only one member of the board was available during the hearing. The Learned Controller should have taken note of the directives of the,,

Orders of the Hon'ble Court in W.P.(C) 12105/2019, issued on 20/11/2019 while conducting hearing on 22/11/2020.",,

9.20 The second point in this regard is that the Learned Controller did not send the documents to the opposition board. As stated in earlier paragraphs,,

the Learned Controller couldn't have sent it as there is no provision in the Rules. At the same time, if these documents were filed in the pretext of",,

publication"" under Rule 62(4) and were found to have evidentiary value, how such evidence could be allowed to be taken on record without scrutiny",,

of the Opposition Board? This proposition is also not supported by the statutory provisions. It appears that an anomaly is, therefore, has been",,

purposefully created by some of the opponents, who chose to take the route of Rule 64(2) for filing additional evidence to avoid the scrutiny of",,

opposition Board, when the statute provides ample opportunity; both through pre-grant opposition and further in post -grant opposition. The above",,

quoted guidelines will help improving the situation in future.,,

9.21 Evidence beyond Pleading,,

It was the argument of the appellant that the opponent did not have any pleading in relation to US'083 for obviousness in their written statement of,,

opposition therefore no evidence, written submission in relation to US'083 for obviousness should be entertained. The Learned Controller has",,

acknowledged this fact in his order at page 11. Further it was argued that there is no reference to Michael acceptor, to Andrew et al as closest prior",,

art, or that LCK is a BTK homologue. It was also argued that evidence cannot travel beyond the material facts pleaded and in the present",,

proceedings, the evidence of Dr. B.M. Choudhary ought not to have been entertained as it was clearly beyond the pleadings/written statement filed in",,

the post grant opposition.,,

The Learned Controller decided on these issues by giving equal opportunity to either side.,,

9.22 We are inclined to accept the Learned Controller's contention on this aspect for this case alone. For other subsequent case(s) the provisions of,,

Rule 59 which prescribe that the reply of opponents should strictly be confined to matters in the patentee's evidence, should be strictly followed. The",,

compliance of the guidelines formulated by the Hon'ble High Court of Delhi and mentioned herein need be strictly complied with for smoothing the,,

process of post -grant opposition.,,

10. Findings of the opposition Board as submitted by the appellant,,

1) The cited document does not anticipate the impugned patent;,,

2) Opponent has not established that the claims are obvious and does not involve inventive step;,,

3) The claims do not fall under the scope of Section 3(d);,,

4) Opponent has failed to establish the ground of insufficiency;,,

5) Opponent has not established the ground of Section 8;,,

6) Mr. Ramana Rao's affidavit fail to explain the anticipation and obviousness of present claimed compounds;,,

11. The appellant submits that the Learned Controller agreed with the opposition board on all other matter other that one that is lack of ""inventive",,

step"". In the impugned order of 4th March 2020, Respondent No. 2 has acknowledged the following:",,

A. The claims of the impugned patent are novel;,,

B. The claims do not fall under the scope of Section 3(d);,,

C. The claims are sufficiently and fairly described in the complete specification;,,

12. Let's now look at the legal provisions under which the ""inventive step' is determined at Indian Patent office (IPO).",,

13. Determination of ""Inventive Step"".",,

13.1 The term ""inventive step"" is defined in section 2(1)(ja) of the Patents Act, 19707 as under:",,

(ja) ""inventive step"" means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic",,

significance or both and that makes the invention not obvious to a person skilled in the art;,,

13.2 The following illustrative presentation will make the concept more clear.,,

Fig: 2,,

13.3 The Patent Office has adopted version 3.0 of Manual of Patent office Practice and Procedure8 w.e.f. 26th November, 2019 available at official",,

website of the Patent office after considering the legal provisions and several judicial pronouncements on determination of inventive step. The,,

guidelines formulated therein are as follows:,,

13.4 The ""obviousness"" must be strictly and objectively judged. While determining inventive step, it is important to look at the invention as a whole.",,

13.5 Accordingly, the following points need to be objectively judged to ascertain whether, looking at the invention as a whole, the invention does have",,

inventive step or not:,,

i. Identify the ""person skilled in the art"", i.e. competent craftsman or engineer as distinguished from a mere artisan;",,

ii. Identify the relevant common general knowledge of that person at the priority date;,,

iii. Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;",,

iv. Identify what, if any, differences exist between the matter cited as forming part of the ""state of the art"" and the inventive concept of the claim or",,

the claim as construed;,,

v. Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the",,

person skilled in the art or do they require any degree of inventive ingenuity?,,

14. The Patent Office has formulated and adopted ""Guidelines for Examination of Patent Applications in the Field of Pharmaceuticals""9. The inventive",,

step tests for the pharmaceutical related inventions are guided by the principles of these guidelines. A brief of relevant provisions are as under:,,

14.1 ""Hindsight analysis4: The 'obviousness' has to be strictly and objectively judged. To judge obviousness objectively, the skilled person needs to",,

eliminate the hindsight analysis. The prior art needs to be judged on the date of priority of the application and not at a later date.,,

14.2 Reasonable expectation of success10: With respect to what is obvious, it must be borne in mind that ""the mere existence in the prior arts, of each",,

of the elements in the invention, will not ipso facto mean obviousness For after all most inventions are built with prior known puzzle-pieces. There must",,

be a coherent thread leading from the prior arts to the invention, the tracing of the thread must be an act which follows obviously"". This ""coherent",,

thread leading from the prior art to the obviousness"" or in other words, ""the reasonable expectation of success embedded in the prior art which",,

motivates the skilled person to reach to the invention, is the most crucial determining factor in ascertaining inventive step"". Obviousness cannot be",,

avoided simply by showing of some degree of unpredictability in the art so long as there was a reasonable probability of success. Obviousness does,,

not require absolute predictability of success. All that is required is a reasonable expectation of success. In the matter of pharmaceutical inventions,,

structural and functional similarity of the product provides this motivation to combine the teachings of the prior arts. A surprising effect, synergistic",,

outcome of the combinations, prior art prejudice etc. usually demonstrates the non-obvious nature of the invention. However, it is reiterated that",,

choosing a better alternative/substitute from the known alternative from the prior art to obtain the known results would not go beyond what may be,,

normally expected from person skilled in the art. Thus, when the solution is from a limited number of identified predictable solutions, which is obvious",,

to try, even the demonstration of surprising effects etc. do not provide any answer to the obviousness.",,

15. After narrating the provisions of the statute and the procedural guidelines at IPO with regard to determination of inventive step, let's analyse the",,

case at hand. In the instant case the Learned Controller has held that the following documents have been relied by the respondent no. 3,,

15.1 Opposition Statement (Sep 2015):,,

a) US5593997 (US '997),,

b) WO2002/080926 (WO '926),,

c) WO2003/000187 (WO '187),,

d) WO2004/100868 (WO '868),,

15.2 Additional Documents (filed in September 2019):,,

a) Chen Mao et al., JBC, 2001 Vol. 276, No. 44 issue 2 pp. 41435-41443",,

b) US 2005/0196851A1,,

c) Andrew et. al., Bioorganic & Medicinal Chemistry Letters, 2002, 12, 1687-1690",,

d) Robert A. Copeland, Evaluation of Enzyme Inhibitors in Drug Discovery, 2005 discloses irreversible enzyme inactivators.",,

e) US7459, 554B2",,

16. Let's now analyse the order of the Learned Controller dated 04/03/2020.,,

16.1 Lck and Btk Inhibitors,,

16.2 Learned Controller admits at page 31 of his order that ""As correctly pointed out by the patentee, all the prior art relied upon by the opponent",,

pertains to Lck inhibitors. But we have to see the prior art as a whole. All the prior art seems to refer to these proteins as under general tyrosine,,

kinase family. ""The patent specification of IN'868 itself states that |0005| Further described are irreversible inhibitors of Btk that form a covalent bond",,

with a cysteine residue on Btk. further described herein are irreversible inhibitors of other tyrosine kinases, wherein the other tyrosine kinases share",,

homology with Btk by having a cysteine residue (including a Cys 481 residue) that can form a covalent bond with the irreversible inhibitor (such,,

tyrosine kinases, are referred herein as ""'Btk tyrosine kinase cysteine homologs"").",,

16.3 [0163] Further, the irreversible Btk inhibitor compounds described herein can be used to inhibit a small subset of other tyrosine kinases that share",,

homology with Btk by having a cysteine residue (including a Cys 481 residue) that can form a covalent bond with the irreversible inhibitor. See. e.g.,",,

protein kinases in FIG. 1. Thus, a subset of tyrosine kinases other than Btk are also expected to be useful as therapeutic targets in a number of health",,

conditions.,,

16.4 [0039] In another aspect are methods for modulating, including irreversibly inhibiting the activity of Btk or other tyrosine kinases, wherein the",,

other tyrosine kinases share homology with Btk by having a cysteine residue (including a Cys 481 residue) that can form a covalent bond with at least,,

one irreversible inhibitor described herein, in a mammal comprising administering to the mammal at least once an effective amount of at least one",,

compound having the structure of any of Formula (A). Formula (B). Formula (C). or Formula (D). In another aspect are methods for modulating,",,

including irreversibly inhibiting, the activity of Btk in a mammal comprising administering to the mammal at least once an effective amount of at least",,

one compound having the structure of any of Formula (A). Formula (B). Formula (C). or Formula (D).,,

16.5 ""In Figure 1, the Patentee has shown how Btk protein has homology with other tyrosine kinases, including Lck. Therefore, the Patentee appears",,

to states in its patent that the inhibitor compounds claimed are not only inhibitors of Btk but they can be expected to inhibit other homologous tyrosine,,

kinases of which Lck is one. The Opponent has also shown that Lck has some homology with Btk and crystal structure of Btk was known (Chen et,,

al. 2001: lines 6-10, para 3; page 3 and figure 3, page 6). It is stated that Btk contains a cysteine residue in its ATP binding domain/kinase domain Lck",,

Btk admittedly have similar structure, with cysteine residue hence the notion that inhibitors of Lck are likely to act as inhibitors of Btk is not without",,

any basis. The argument of the Patentee that Lck and Btk are totally unrelated and all prior art regarding Lck must be rejected does not appear fully,,

correct as it goes against their specification of IN'968. Hence, reliance on prior art pertaining to compounds that act as Lck inhibitors is not barred",,

from the Opponent."""",,

[Emphasis added],,

16.6 The opponents also tried explaining that the complete specification itself mentions that both Lck and Btk are analogous and refers to Para [0025],,

and [00136] of specification in this regard. [0025] ""In another aspect are inhibited tyrosine kinases comprising a Bruton's tyrosine kinase, a Bruton's",,

tyrosine kinase homolog, or a Btk tyrosine kinase cysteine homolog thereof"" i.e. the compounds of the invention work on BTK homologs and LCK is a",,

homolog of BTK.,,

16.7 In para 00136 of the specification defines two proteins to be ""substantially identical"" if they share more than 60% same amino acids, further Fig 1",,

of specification shows that BTK and LCK differ in only 2 amino acids i.e. as per specification BTK and LCK are ""substantially identical"".",,

16.8 The appellant has explained the Classification of Protein Kinases as follows:,,

16.9 Further, giving the reference to the complete specifications they explain that how Btk and Lck are different and went on to say that nowhere in",,

the specification Btk and Lck are shown analogous. They submit as under:,,

16.10 In this regard, it is submitted that BTK and LCK belong to different non-receptor tyrosine kinase family.",,

a) Ibrutinib claimed and covered by IN968 is an irreversible Bruton tyrosine kinase inhibitor that works on B cells.,,

b) Table 1 of the patent specification (reproduced below) shows different types of receptor/non-receptor tyrosine kinases. LCK (and LYN and SYK),,

does not have a cysteine residue in the kinase domain, let alone a cysteine residue corresponding to the 481 position of BTK.",,

c) It is further submitted that Ibrutinib acts by chemically reacting with cys 481 residue to form a covalent irreversible bond with BTK. Accordingly, it",,

would not be accepted that LCK, LYN and SYK would react with Ibrutinib to form a covalent bond as none of them have a cysteine residue, let",,

alone having a cysteine residue at the 481 position.,,

[Emphasis added],,

d) It is further submitted that specification clearly defines what small subset of other tyrosine kinases that share homology with Btk by having a,,

cysteine residue (including a Cys 481 residue). LCK does not belong to the list since it does not have a cysteine amino acid residue at a position similar,,

to the 481 position of BTK. It is pertinent to note that the LCK contains Serine at the corresponding 481 position and not the Cysteine amino acid,,

residue.,,

[FIG. 1 of the specification],,

16.11 BTK contains Cysteine at 481 position, while LCK contains Serine amino acid Cysteine amino acid contains -SH group that can react with",,

Michael Acceptor moiety to form a covalent bond. LCK at 481 position contains Serine amino acid, which cannot react with the Michael Acceptor",,

moiety. 20 amino acids,,

16.12 LCK is not BTK homolog or BTK cysteine homolog according to definition at para 5 and 130/131 of patent specification,,

16.13 The appellant herein has also countered extrapolating that crystal structure BTK and LCK are similar based on prior art US'851 and Chen et.,,

al. They submit that ""Respondent no. 2 failed to appreciate that mere knowledge of crystal structure does not automatically make it a validated target.",,

It is further submitted that the expert of the Appellant Dr. Alex Bridges (AB1) at page 14 clearly states the following:,,

With regard to paragraphs 8 and 9, Dr. Choudhary discusses tyrosine kinase inhibitors and draws an incorrect conclusion that the BTK kinase domain",,

is structurally similar enough to the kinase domain of the SRC family kinases, such as LCK. Even small differences in the binding sites of closely",,

related kinases can make very big differences in inhibitory potency, and even today, the potencies of kinase inhibitors developed for one kinase are",,

often very difficult to extrapolate to other kinases, even closely related ones.""",,

16.14 The appellant further submit that US '851 and Chen et al, discloses that the three-dimensional or confirmation of the enzyme BTK and LCK are",,

different. The documents clearly discloses that the conformation of helix αC of the BTK-KD is different from the open conformation of helix αC in c-,,

SRC as well, in accordance with a unique conformation of the A-loop in BTK-KD. Significant structural differences between BTK-KD and LCK-",,

KD were also found in helices αDE, αEF, αG and αI (which differed in location by approximately 2 Ã…), and in the glycine loop (β1β2). Thus, a",,

person skilled in the art would know that BTK and LCK are not similar. In this reference is made to the paragraph [0233] of US '851.,,

16.15 It is submitted that Chen et. al. discloses that the helix αC in phosphorylated LCK-KD adopts a closed conformation consistent with a,,

catalytically active state in contrast the helix αC of the BTK-KD adopts a more open conformation than that of the LCK-KD. Further, the N-and C-",,

terminal lobes, the C-terminal ends of the helix αC in unphosphorylated BTK-KD versus phosphorylated LCK-KD are markedly different. The",,

distance between the Cα position of residue 440 in BTK-KD and its counterpart in LCK is 6.7 Ã…. From the pivot point at residue 452, helix αC of",,

BTK-KD needs to be rotated toward the ATP binding cleft by 20Â° to be superimposed onto the helix αC of the LCK-KD.,,

16.16 We have analysed the contents of the complete specification of IN'968, the prior arts, the contention of both the parties and the views of the",,

Learned Controller. The Learned Controller holds Lck and Btk analogous primarily for two reasons i.e. allegedly admitted facts in the Compete,,

specification and the views expressed by the opponents based again on alleged admitted facts of complete specification, US'851 and one document-",,

Chen et al, (The Journal of Biological Chemistry, 2001 Vol. 276, No. 44 issue 2 pp. CC:696).",,

16.17 We have seen that nowhere in the complete specification of IN'968 that both Lck and Btk are shown analogues. Lck does not share homology,,

with Btk as it does not have a cysteine residue at 481 position rather LCK contains Serine at the corresponding 481 position and not the Cysteine,,

amino acid residue. [Fig 1 of complete Specification].,,

16.18 For ""inventive step"" determination the prior arts should be analogous. In order for a reference to be proper for use in an obviousness rejection,",,

the reference must be analogous art to the claimed invention11. We are of the firm opinion that the prior arts chosen by the opponents are not,,

analogous and any determination of inventive step based upon the non-analogous prior arts is not going to yield proper result.,,

16.19 The other issue raised by the appellant is determination of inventive step by the Learned Controller on the points which were neither taken up by,,

the Respondents No. 3 nor argued. This is with regard to comparison about similarity of N-methyl piperazine and piperidinyl group. They submits as,,

under:,,

16.20 Respondent No. 2 has made not only a legal error but also scientific errors when deciding the issue of inventive step which is neither based on,,

the arguments of the Appellant/Respondent no. 3, written submissions or the evidence filed by their experts.",,

16.21 They have drawn the attention of the Board to the following on pages 39, 40 and 41 of the impugned order:",,

16.22 At page 39, the Respondent No. 2 reproduced the prior art Andrew et al and states as follows:",,

Our results also indicated that an appended solubilizing heterocycle is in the ribose pocket, such as the N-methyl piperazine in 1"" [second para, second",,

column, page 111].",,

16.23 In this regard, it is submitted that Respondent No. 2 incorrectly reproduced compound 1 of Andrew et. al. at page 39 of the order. The correct",,

structure of compounds 1 and 2 as disclosed in Andrew et al, is shown below:",,

16.24 Respondent No. 2 correctly states that the said document shows the relevance of cyclohexyl group with N-methyl piperazine fills up the ribose,,

pocket of the Lck protein. Contrary, to this statement, Respondent No. 2 at page 41 comes to a finding that ""because the author has tried other groups",,

also and has mentioned that N-methyl piperazine occupies the ribose pocket"". At page 39, Respondent No. 2 states that ""cyclohexyl group with N-",,

methyl piperazine fills up the ribose pocket of the lck protein"" and then on page 41 of the order states that ""N-methyl piperazine occupies the ribose",,

pocket."""",,

16.25 The Respondent No. 2 makes the incorrect comparison about similarity of N-methyl piperazine and piperidinyl group without any basis. It is,,

respectfully submitted that a POSA would know that a cyclohexyl ring appended with N-methyl piperazine is no way similar in structure, electronics",,

or sterics to a piperidine group (as clearly seen in the figure below).,,

16.26 It is respectfully submitted that the act of the Respondent No. 2 to equate the ""1-methyl-piperazin-4-yl-cyclohexyl"" moiety interchangeable with",,

a ""piperidine"" ring is without any scientific reasoning and is against the basic principles of medicinal chemistry. At the outset, these two groups are",,

structurally and functionally different and one cannot use them as interchangeable in the absence of any empirical studies. Medicinal chemistry is an,,

unpredictable art and a small change in the structure of a compound can have drastic effect on its activity. One cannot predict the effect of such,,

modification without performing empirical studies.,,

16.27 Further the statement of the Learned Controller that ""In chemistry, there are only few aza-heterocyclic groups and piperidinyl is not",,

uncommon."" appears to be without any scientific basis. As per the submission of the appellant In fact, in chemistry, there are far too many aza-",,

heterocyclic groups (to name just a few, these groups include pyridine, diazine, quinoline, isoquinoline, pyrrole, indole, aziridine, azetidine, azetene,",,

diazetidine, pyrrolodine, imidazolidine, piperidine, piperazine, morpholine, thiazine, and isomers of each of these based on how they are substituted)",,

16.28 The Learned Controller further holds that it is common knowledge that piperidinyl group is closely similar to cyclohexyl group which was already,,

present in the compound of Andrew et al. As per the submission of the appellant the piperidinyl group is closely similar to cyclohexyl group is not,,

common knowledge and not true. These are very different groups.,,

16.29 The statement of the Respondent No. 2 in his order that ""a POSA would replace cyclohexyl-N-methyl piperazine with piperidinyl group...It is",,

not stated that this step is not technically impossible or if such step is taken then no anti-tyrosine kinase activity will come"" has also attracted the",,

comments from the appellant who states that replacing one group with another (piperidine for cyclohexyl appended with N-methyl piperazine) could,,

lead to change in the compound's electronic and steric properties and binding to the active site (Lck). It would be entirely unpredictable whether,,

making such a modification would produce anti-tyrosine kinase activity or not. Medicinal chemistry is an unpredictable art and even a small change in,,

the structure of a compound can have drastic effect on its activity. Here the change proposed by Respondent No. 2 is a radical change and one,,

cannot reasonably expect that any anti-tyrosine kinase activity will be maintained, much less that there will be any activity against Btk.",,

a) The Learned Controller has also stated that no arguments were made by the Patentee doubting the substitution of phenoxy phenyl group at the 3rd,,

position of compound 2 of Andrew et al. The appellant submits contrary statements that Andrew et. al. investigates the activity of variants of,,

compounds 1 and 2 against different kinases such as LCK, SRC, KDR and Tie 2 by making modifications at the 3' position of the pyrazolo",,

pyrimidine/pyrrolopyrimidine core.,,

b) That the focus/teaching of the Andrew et al as shown in Table 4 reproduced herein below was to assess the nature of the Ph-X-Ph linker in these,,

tyrosine kinase inhibitors that defines the potency and, perhaps more interestingly, the selectivity for lck, src, kdr and tie-2.",,

c) As discussed above, Andrew et al teaches the importance of the piperazine ring appended onto the cyclohexyl group. A POSA reading the article",,

would be motivated to use and retain this substitution at the N-1 position of the scaffold.,,

d) Andrew et al teaches that ""[t]he solvent exposed region is characterized by contacts between the internal piperazine nitrogen and the conserved",,

side chain acid of Asp326"" at page 1690, left column, first paragraph. Thus, a POSA would be motivated to maintain such a contact, which would",,

further motivate a POSA to use and retain the piperazine ring appended onto the cyclohexyl group as taught in Andrew et al. A POSA would not,,

remove the N-piperazinyl group as it has provided the very advantage the Andrew et al. ascribes to it. This would teach away from removing the,,

piperazinyl group. Accordingly, without a motivation to change the N-piperazinyl-cyclohexyl group a POSA would not change that group.",,

e) That a person skilled in the art based on the teaching of Andrew et. al. would have no reason to replace the ""cyclohexyl ring appended with N-",,

methyl piperazine"" at N-1 position of compound 2 with a ""piperidine ring"" as the said group was important for the activity of the compounds disclosed",,

in Andrew et al.,,

16.30 Motivation to attach a Michael acceptor from Robert Copeland et. al. to hypothetical compound (which the Respondent no. 2 has not even,,

referred to in the impugned order) from Andrew et. al. and other prior art references.,,

16.31 The view of the Respondent No. 3/opponents on this aspect is that Addition of Michael acceptor to form Irreversible Inhibitor is obvious:16.32,,

Respondent No. 3 submits that Robert A. Copeland (2005) discloses that compounds produced by incorporation of Michael acceptors to any known,,

drug molecule, in order to covalently inactivate cysteine residues in their target enzymes have been clinically tested and found to be effective",,

irreversible inhibitors.,,

A general scheme for reaction of a Michael acceptor with the nucleophilic side chain sulfur of an enzyme Cysteine residues. Figure 8.6, Copeland,",,

page 663,,

As disclosed in Copeland, groups at Parke-Davis (now Pfizer) and Wyeth independently incorporated a Michael acceptor into compounds that bind to",,

the ATP binding pocket of EGFR to covalently associate with Cys 773 within this pocket. The Wyeth compound, EKB-569, irreversibly inhibits EGFR",,

in vitro,,

With respect to EKB-569, Copeland states on page 665 that ""the compound has entered human clinical trials for the treatment of cancer."""",,

With respect to Cl-1033, Copeland states on page 666 that ""This compound has also entered human clinical trials for the treatment of cancer"""",,

16.33 The appellant submits their arguments as under:,,

16.34 Respondent No. 2 on page 40 of the impugned order states as follows:,,

After having arrived at a certain structure, a POSA would only seek to make only minimum changes to that structure so as to maintain the effect."""",,

16.35 After the arbitrary selection of the hypothetical compound from Andrew et al., Respondent No. 2 states that a person skilled in the art would",,

attach a Michael acceptor from Robert Copeland et. al. to the hypothetical compound from Andrew et al. This is a radical modification of the,,

hypothetical compound, not a ""minimum change"". It would lead to a radical change in the hypothetical compound's mechanism of action, binding in the",,

active site, electronic and steric properties as well as introducing potential off-target binding, glutathione binding and other possible negative effects",,

which are outlined below.,,

16.36 Respondent no. 2 on page 41 of the impugned order states as follows:,,

Thus the strategy of making irreversible inhibitors has been proposed for many proteases as well as kinase targets and as per the article, some of the",,

molecules using this strategy have entered clinical trials."""",,

Page 43,,

If one would see the compound that has come from Andrew et al there is only one position that is available for further substitution - the nitrogen at",,

the free end of the piperidinyl group. The Michael acceptor cannot be added to the 3rd position as it is already occupied by phenoxy-phenyl group."""",,

16.37 It is submitted that for this purpose the Respondent no. 2 relies upon two irreversible inhibitors for a different and unrelated kinase to BTK,,

referred to in Robert A. Copeland et. al. namely, EKB-569 and CI-1033 having the structure given below:",,

16.38 The Respondent no. 2 failed to appreciate that the expert of the Appellant has given the evidence with regard to this document as CI-1033 is a,,

molecule invented by the expert of the Appellant.,,

16.39 Respondent No. 2 has arbitrarily come to the conclusion that Michael acceptor cannot be added to the 3rd position as it is occupied by phenoxy-,,

phenyl group.,,

16.40 Secondly the Respondent No. 2/Learned Controller provided no basis for selection of ""vinyl ketone"", [-COCH=CH2] to use as a Michael",,

acceptor, since the Petitioner in his patent specification provided a laundry list of Michael acceptor.",,

16.41 Furthermore, even if one assume to use ""vinyl ketone"", [-COCH=CH2] to use as a Michael acceptor and try to incorporate the same in the",,

hypothetical patch compound derived by the Respondent No. 2, there is no teaching to incorporate the Michael acceptor on the nitrogen atom of the",,

piperidinyl ring and not on the 4-amino group.,,

16.42 There is no teaching in any of the prior art identified by the Respondent No. 2 to modify the compounds to add a Michael acceptor anywhere on,,

the structure. Indeed, a POSA would have had many reasons not to add a Michael acceptor.",,

16.43 Teaching away from using Michael acceptors as it causes immunogenicity toxicity and instability: Not only is the Michael acceptor not described,,

in any of the references from the Abbott group or other references relied on by the Respondent No. 2, the prior art teaches against its use.",,

(i) A POSA would be aware that introducing Michael acceptor groups can cause glutathione depletion, genotoxicity, immunogenicity, and instability.",,

Indeed, compounds with Michael acceptors or giving rise to Michael acceptor metabolites have been abandoned for toxicity reasons.",,

b. According to Respondent No. 2, POSA would ignore the warnings concerning Michael acceptors and the conventional wisdom to avoid Michael",,

acceptors and irreversible covalent groups in drugs (and a POSA would not have done so), a POSA would have had no reason to select the exact an",,

acryloyl groupMichael acceptor found on ibrutinib from among hundreds of possible Michael acceptors.,,

c. The Respondent No. 2/Learned Controller has provided no reason whatsoever why POSA would make the acrylamide a part of the piperidine ring,,

instead of having it come off of the pyrazolopyrimidine scaffold or other positions on the piperidine ring.,,

d. It is pertinent to note that both the molecules are distinctly dissimilar where CI-1033 is an EGFR (receptor tyrosine kinase) and Ibrutinib (non-,,

receptor tyrosine kinase) is a BTK inhibitor.,,

e. In this regard it is submitted that,,

(i) CI-1033 is an EGFR inhibitor and not BTK inhibitor;,,

(ii) The Michael acceptor on CI-1033 is on the quinazoline scaffold, which is not a pyrazolo pyrimidine scaffold as in Ibrutinib;",,

(iii) The Michael acceptor in Ibrutinib is on the substituent, piperidine at the 3rd position and not on the pyrazolopyrimidine scaffold.",,

16.44 Without any foundation, the decision on page 43, states that there is only one place to put the Michael Acceptor - the nitrogen on the piperidinyl",,

group. The decision states that the Michael acceptor cannot be added to the phenoxy-phenyl group. However, as depicted by the EKB-569 and CI-",,

1033, the Michael acceptors on those two compounds are not on a piperidine. The Michael acceptors on both of those compounds are directly",,

attached to the bicyclic cores.,,

16.45 Thus, the Respondent No. 2 clearly ignored that from Copeland, alone and in combination it is clear that:",,

a) The molecule CI-1033 is distinctly dissimilar that is an EGFR (receptor tyrosine kinase) and Ibrutinib (non-receptor tyrosine kinase) is a BTK,,

inhibitor.,,

b) Therefore, a POSA would have had no reasonable expectation of success using any component of CI-1033 (EGFR inhibitor with quinazoline",,

scaffold) for the design of a BTK inhibitor.,,

c) Similarly, compound EKB-569 from Copeland, which like CI-1033, is an experimental EGFR (receptor tyrosine kinase) inhibitor and is structurally",,

dissimilar to Ibrutinib, which is a BTK (non-receptor tyrosine kinase) inhibitor. Further, as seen below EKB-569 comprises an acrylamide group",,

further substituted with a dialkylamino substitution, which is different than an acryloyl group on Ibrutinib.",,

d) A POSA reading Copeland would read it as a whole and become aware of the potential liabilities of using irreversible inhibitors as drugs and,,

therefore there is no motivation to even attempt in creating an irreversible inhibitor let alone a irreversible BTK inhibitor.,,

e) A POSA would be aware that introducing Michael acceptor groups can cause glutathione depletion, genotoxicity, immunogenicity, and instability",,

and have been abandoned due to toxicity.,,

16.46 The appellant further submits that Clearly therefore, there was no reason for selecting compound 2 from Andrew et al for an lck for irreversible",,

Btk inhibitor, modifying the compound 2 of Andrew et al by removing the most critical part of molecule despite the teaching of the said document",,

being to modify the 3' position of the pyrrolopyrimidine/pyrazolopyrimidine ring, no reason provided for selecting piperidine ring let alone 3' piperidine",,

ring as present in Ibrutinib (the Respondent No. 2 does not even discuss this in his order); no motivation to attach a Michael acceptor of EGFR,,

(Receptor tyrosine kinase inhibitor) to a hypothetical molecule which is an LCK inhibitor to arrive at an irreversible BTK inhibitor (a non receptor,,

tyrosine kinase),,

17. After considering the issues raised by the appellant, the counter arguments of the Respondent no. 3 and the order of Learned Controller, we are",,

inclined to agree with the proposition of the appellant. These substitutions are somehow trying to trace back to the invention by keeping the invention in,,

forefront and it amounts to ""hindsight analysis"". As mentioned above, the pharmaceutical guidelines itself illustrate in one of its example that even after",,

a ""hindsight analysis"" if combination of two prior art documents fails to provide the result as claimed in an invention in question, then the teaching of",,

such prior art documents are considered to be teaching away. In the present case, we have observed the similar scenario, wherein the combination of",,

the teachings in the cited prior arts documents failed to reach at a compound which selectively inhibits Btk.,,

18. Conclusions,,

18.1 Firstly, we have observed that there has been a trend by the opponents in post-grant oppositions in the Patent Office to file the additional",,

evidences, either seeking leave of Controller under Rule 60 after the hearing being fixed by the Controller under Rule 62 or place documents having",,

evidentiary value in guise of ""publication"" under Rule 62(4). Either actions do not find proper basis in the Rules and need to be addressed so as to",,

smoothen the process of post-grant oppositions and reduced the timelines being consumed unduly. As stated in earlier paragraphs, It should be ensured",,

that the provisions of Rules 60 and 62 should be followed strictly and no one should be allowed to file additional evidence(s) in the guise of,,

publication"" to avoid the scrutiny of their documents/evidences by the members of opposition Boards.",,

18.2 The Learned Controller has agreed with the views of the Opposition Board on all the issues except ""lack of inventive step"". It is well within his",,

powers as provided in the law to disagree with the opinion of the opposition Board, but while he disagreed on this ground should have annotated the",,

reasons thereof properly.,,

18.3 Secondly, looking at the order of the Learned Controller we have noted that the he has held that ""However, I have not made specific mention of",,

each of the judgments-because the matter is more factual."" Here, it is pertinent to mention that several judicial pronouncements have made this point",,

amply clear that determination of ""inventive step' is mixed question of law and facts depending largely on the circumstances of the case12. Therefore,",,

ignoring the legal aspects from the determination of the ""inventive step"" is ignoring the teachings of the judicial pronouncements, ignoring the",,

methodology of determination of inventive steps in the ""Manual of Patent office Practice and Procedure, 2019""13 and ignoring the procedures",,

mentioned in the 'Guidelines for Examination of Patent Applications in the Field of Pharmaceuticals""10.",,

18.4 Further, it was also held by Hon'ble High Court of Delhi in the judgment quoted below that ""Thus obviousness is a question of law based on facts",,

and the burden to prove is on the party which alleges however after the party which alleges makes out a prima facie case of invalidity on the ground,,

of obviousness, the burden shifts on the inventor to disprove obviousness.14 The initial burden of proving the lack of inventive step thuds lies on the",,

opponent.,,

18.5 The Learned Controller concludes ""I find that various cited documents clearly disclose or teaches all the features of claimed invention and",,

invention consists merely a combination of known features, which does not give rise to an inventive technical advance. It appears that these are",,

obvious modifications that a POSA would make and could expect a compound coming out to have tyrosine kinase activity especially against Lck. The,,

combination of features and making of ibrutinib as claimed in impugned patent is obvious and therefore lack of inventive step over the cited prior art,,

documents. Hence, the ground of obviousness is maintainable."""",,

[Emphasis Added],,

18.6 Firstly, whether the invention was a combination of hitherto known features is based on ""hindsight analysis"" and we are not inclined to accept it.",,

Even after the hindsight analysis and permutations/combinations, the person skilled in the art could not reach the subject matter of the present",,

invention. Even if we consider for a while the contention of the Learned Controller, Hon'ble Supreme Court laid down the following criteria for",,

assessing ""inventive step"" which will be very appropriate in this situation. In M/s. Bishwanath Prasad Radhey Shyam v. M/s. Hindustan Metal",,

Industries15, ""It is important that in order to be patentable an improvement on something known before or a combination of different matters already",,

known, should be something more than a mere workshop improvement; and must independently satisfy the test of invention or an 'inventive step'. To",,

be patentable the improvement or the combination must produce a new result, or a new article or a better or cheaper article than before. The",,

combination of old known integers may be so combined that by their working interrelation they produce a new process or improved result. Mere,,

collection of more than one integers or things, not involving the exercise of any inventive faculty, does not qualify for the grant of a patent."" Hence,",,

once the Learned Controller comes to conclusion that invention consists merely a combination of known features, which does not give rise to an",,

inventive technical advance, whether it was judged that this combination is more than a mere workshop improvement or whether the new combination",,

satisfies the test of inventiveness on its own? [Emphasis added]. The order of the Learned Controller is silent on these aspects.,,

18.7 The Learned Controller concludes in his decision dated 04/03/2020 ""Having considered all the submissions made by the applicant/patentee during",,

the hearing as well as submissions made by the opponent and also in view of the above circumstances and observations, I hereby conclude that the",,

instant granted claims are obvious to a ordinary person skilled in the art therefore lack of inventive step over cited prior art documents. ....."""",,

[Emphasis added].,,

18.8 It is worth mentioning here that the concept of ""ordinary"" person skilled in the art is not available in the Indian Patent Act, 1970. The",,

determination of ""inventive step"" as envisaged in the Patents Act under section 2(1)(ja) clearly stipulates ""person skilled in the art"". The adjective",,

ordinary"" does not find mention with ""person skilled in the art"" in the entire Patent Act, 1970. That is why the test of ""inventive step"" as envisaged in",,

the ""Manual of Patent office Practice and Procedure 2019"" finds its basis in the Hon'ble Supreme court judgment in Bishwanath Prasad Vs.",,

Hindustan Metal Industries4,,

18.9 The concept of ""person skilled in the art"" is often confused with the concepts of ""a person in India possessing average skill in, and average",,

knowledge"" as provided in of section 64(h) quoted below:",,

(h) that the complete specification does not sufficiently and fairly describe the invention and the method by which it is to be performed, that is to say,",,

that the description of the method or the instructions for the working of the invention as contained in the complete specification are not by themselves,,

sufficient to enable a person in India possessing average skill in, and average knowledge of, the art to which the invention relates, to work the",,

invention, or that it does not disclose the best method of performing it which was known to the applicant for the patent and for which he was entitled",,

to claim protection;"""",,

18.10 The requirement of ""a person in India possessing average skill in, and average knowledge of, the art to which the invention relates, to work the",,

invention"" is for determining the ""sufficiency of disclosure' by proving ""workability"" of invention and it is different than that of ascertaining the",,

patentability requirements such as determination of ""inventive step"" of an invention which requires ""person skilled in the art"". In absence of any",,

definition of this term in the Patents Act, 1970, the definition provided in Bishwanath Prasad Vs. Hindustan Metal Industries16 as ""a competent",,

craftsman (or engineer as distinguished from a mere artisan)"" is adopted in said Manual13. The relevant portion of the Judgment of Hon'ble Supreme",,

court in Bishwanath Prasad Vs. Hindustan Metal Industries is quoted below:,,

18.11 Another test of whether a document is a publication which would negative existence of novelty or an ""inventive step"" is suggested, as under:",,

Had the document been placed in the hands of a competent draftsman (or engineer as distinguished from a mere artisan), endowed with the common",,

general knowledge at the ""priority date"", who was faced with the problem solved by the patentee but without knowledge of the patented invention,",,

would he have said, ""this gives me what I want?"" (Encyclopedia Britannica; ibid). To put it in another form: ""Was it for practical purposes obvious to a",,

skilled worker, in the field concerned, in the state of knowledge existing at the date of the patent to be found in the literature then available to him, that",,

he would or should make the invention the subject of the claim concerned?"" [Halsbury, 3rd Edn., Vol. 29, p. 42 referred to by Vimadalal, J. of Bombay",,

High Court in Farbwerke Hoechst & B. Corporation v. Unichem Laboratories AIR 1969 Bom 255 (Bom HC)] """,,

[Emphasis added],,

18.12 On the issue of inventive ingenuity of the invention, we have analyzed the contentions of either party, analysed the prior arts and the order of the",,

Learned Controller and arrived at the conclusion that the Learned Controller could not have arrived at the present findings without the ""hindsight",,

analysis"". The ""alleged ordinary person skilled in the art"" as the Learned Controller conceived, could not have visualised the chemical substitutions",,

such as replacing Cyclohexane at position 1 of Andrew's compound with Piperidine, let alone obtaining the compound of the impugned invention with",,

Michael acceptor.,,

18.13 This case is, therefore, a clear case of 'hindsight analysis' as mentioned above. The pharmaceutical Guidelines10 are quite clear on hindsight",,

analysis when it says ""The 'obviousness' has to be strictly and objectively judged. To judge obviousness objectively, the skilled person needs to",,

eliminate the hindsight analysis...."" This approach is against the spirit of the law. As stated earlier, one of the significant analysis while determining the",,

inventive step is ""v. Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been",,

obvious to the person skilled in the art or do they require any degree of inventive ingenuity?"". Even Bishwanath Prasad Vs. Hindustan Metal",,

Industries16 held that ""Had the document been placed in the hands of a competent craftsman (or engineer as distinguished from a mere artisan),",,

endowed with the common general knowledge at the 'priority date', who was faced with the problem solved by the patentee but without knowledge of",,

the patented invention, …."" [Emphasis added] In the instant appeal it is observed that every effort by the alleged ""ordinary person skilled in the art"" is",,

done to reach to the invention having full knowledge of the invention.,,

18.14 Further, with regard to analogous prior art, we conclude that an inhibitor compound as described and claimed in IN'968 cannot be generalized in",,

its selectivity and function. We have seen that nowhere in the complete specification of IN'968 that both Lck and Btk are shown analogues. Lck does,,

not share homology with Btk either and hence, the prior art document are considered to be non-analogous. Therefore, the determination arrived at on",,

the issue of 'inventive step' cannot be said to be objectively assessed.,,

19. We, therefore, order that the impugned order of the Learned Controller dated 04/03/2020 are void of merit and is being set aside forthwith.",,

20. A copy of this order be served to Respondent No. 1 to take immediate step to affect necessary changes in the records and the e-register.,,

21. The appeal is allowed. All the related applications/petitions are also disposed of herewith. No cost.,,

1Available at http://ipindia.nic.in/writereaddata/Portal/ev/sections/ps25.html,,

2Available at http://ipindia.nic.in/writereaddata/Portal/ev/rules/pr56.html,,

3Available at http://ipindia.nic.in/writereaddata/Portal/ev/rules-index.html,,

4ibid,,

5Supra 3,,

6Pharmacyclics LLC v. Union of India and others; W.P.(C) 12105/2019 & CM APPLs. 49593/2019, 49594/2019, 49595/2019 Available at",,

https://patentsrewind.files.wordpress.com,,

7Available at http://ipindia.nic.in/writereaddata/Portal/ev/sections/ps2.html,,

8Available at http://www.ipindia.nic.in/writereaddata/Portal/Images/pdf/Manual_for_Patent_Office_Practice_

9Available at http://www.ipindia.nic.in/writereaddata/Portal/IPOGuidelinesManuals/1_37_1_3-guidelines-for-

pharmaceutical.pdf,,

10Supra 13,,

11Available at https://www.uspto.gov/web/offices/pac/mpep/s2141.html,,

12Cipla Ltd. vs. F. Hoffmann-La Roche Ltd. & Anr. on 27 November, 2015; Available at https://indiankanoon.org/doc/57798471/",,

13Supra 12,,

14Supra 17,,

15M/s. Bishwanath Prasad Radhey Shyam Appellant v. M/s. Hindustan Metal Industries SC/0255/1978 : AIR 1982 Supreme Court 1444,,

16Supra 21,,