
(2018) 07 CAL CK 0097

In the Calcutta High Court

Case No : GA No.2786 OF 2017, CS No.388 OF 2014

Jasper Motors Private Limited And Another APPELLANT
Vs
Proprietor, Basantee Battery Operated Rickshaw And Others. RESPONDENT

Date of Decision : 18-07-2018

Acts Referred:

Patents Act, 1970 — Section 2(1), 3(j), 64, 64(1)(a), 64(1)(e), 64(1)(f), 64(1)(h), 64(1)(k), 107

Citation : (2018) 07 CAL CK 0097

Hon'ble Judges : SOUMEN SEN, J

Bench : Single Bench

Advocate : Kanishk Sinha, Rudraman Bhattacharya, Sayan Roy Choudhury, Sanchari Chakraborty, Surojit Dasgupta, Soumik Chakraborty, Rabi Prosad Mookerjee

Judgement

Soumen Sen, J

This is an application by DYS Impex Private Limited for leave to intervene and for recalling of the order dated 17th June, 2015 passed in G.A.3378 of

2014. The applicant is defendant no.2.

In a suit for infringement of patent an order of injunction was passed on 17th June, 2015 in relation to the patent of the plaintiff.

The applicant claims to be a manufacturer of battery operated electric cycle rickshaws, cargo vehicles and their spares which are sold under the word

mark "Basantee" and device "Basantee Eco Drive".

The grounds for recalling of the order are primarily on the grounds mentioned in Section 64 of the Patents Act. The said Section enumerates

grounds by which a patent can be revoked. The grounds for revocation in the instant matter are:

a) The patent of the plaintiff is based on a prior published document. The plaintiffs have obtained the patent by copying and pasting materials from various prior published documents. The patent comprises features that were available in public domain prior to 2nd May, 2005, being the date of the patent.

b) The invention claimed in claims 1 to 5 was publicly known or publicly used in India before 2nd May, 2005. The invention, as claimed in claims 1 to 5 is obvious and does not involve any inventive step.

c) 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, the description of the method or the instruction 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.

d) The subject of claims 1 to 5 is not an invention within the meaning of the Act and is not patentable.

The petitioner refers to a literature published in Wikipedia. At the time of argument this literature was not relied upon. Apart from the aforesaid, the petitioner has relied upon an article published in 1999 and technical bulletin of Duracell, to demonstrate that the patent is an exact replica of what is described as reaction formula in Page 18 of Annexure I, and what is claimed in claim 1 of Annexure J, in as much as figure 2.11 of Page 2 of the Bulletin of Duracell, would make it clear that this figure has been copied as figure 4 in the patent.

The petitioner has also referred to PCT publication of PCT application of PCT/2001165 published on 18th March, 2004 to demonstrate that the first page of the said document would make it clear that the reaction formula in page 17 of Annexure I and also the feature and result in the characteristic portion of claim 1 are all known.

Mr. Rudraman Bhattacharya, Learned Counsel appearing on behalf of the applicant has referred to Section 64(1)(a), 64(1)(e), 64(1)(f), 64(1)(h) and 64(1)(k) of the Patents Act, 1970 and submits that the grounds taken in the petition are covered by the said provisions of the Patents Act 1970. The literature and documents disclosed in the petition clearly support the grounds made out in the petition for revocation of the patent. It is submitted that

under Section 107 of the Patents Act, 1970, the petitioner is entitled to take such grounds as a defence.

Mr. Bhattacharya submits that the mere fact of granting of a patent is not in itself an indication that the plaintiff has established to the satisfaction of

any authority that he has a right to the monopoly of which he claims.Â The order of the patent controller granting the patent and the decision on the

opposition cannot in itself give rise to a presumption of validity of the patent notwithstanding the investigation and examination made and the same can

be challenged.Â The actual user and duration of the patent alone cannot give rise to a presumption of validity of the patent.

Mr. Bhattacharya, the learned Counsel in this regard has relied upon the decision of our Court in Industrial Gases Ltd. & Anr. Vs. The Kamsup

Industrial Gases Ltd. Anr. reported at PTC (Suppl) (2) 358 (Cal) and a Division Bench judgment of Delhi High Court in Franz Xaver Huemer vs.

New Yash Engineers reported at AIR 1997 Del 79, and two Single Bench decisions of Delhi High Court, namely, B. Braun Melsungen Ag & Ors vs.

Rishi Baid & Others reported at 2009 (40) PTC 193 Del and Sandeep Jaidka vs. Mukesh Mittal and Anr. reported at (2014) 5 High Court Cases

(Del) 715 / 2014 SCC OnLine Del 2970. Mr. Bhattacharya submits that the rationes decidendi of the aforesaid decisions would show that if the

process and its use is known prior to its registration, the patentee cannot claim injunction.Â The patentee would be required to make available

material to the court to show that he has â??real prospect of succeedingâ? in his claim for permanent injunction.Â The patentee would also be

required to show that they have put the patented product on the market.Â It is submitted that the description claims and the drawings of the patent

have no royalty, inasmuch as what has been claimed are all well-known in India with regards to prior published documents.

The learned Counsel has referred to U.S. Patents namely, U.S.6248476 and US 4957826 to show that the said documents would make it amply clear

that the person skilled in the art can easily arrive at the feature of claim 1 of Annexure J when the documents are construed by him.Â Accordingly

claim 1 and those dependent on it lack inventive step.Â The characterized portion of claim 1 of the patent states that the Fuel Cell of the patent

produces maximum voltage of 1.65 volt. This is expressly known from the PCT publication dated 18th March, 2004.Â This clearly establishes that no

technical improvement is achieved by the patent and as such it lacks inventive step. Moreover, no prototype has been described showing how this

voltage is achieved.Â The description adduced as Annexure I on perusal would show that, how this result is achieved is not at all explained with

reference to the prototype or otherwise.Â Only at two places it has been stated that the voltage achieved is 1.65 volt.

It is submitted that Claim 1 defines a zinc anode in the precharacterized part indicating that this is known.Â However, claim 2 defines an anode is

made of zinc.Â This is not only a meaningless repetition but also is not justified, since dependent claims should be restricted to defining preferred

features of the characterized portion of Claim 1. Claims 4 and 5 define results while the preamble is directed to a fuel cell system.Â Hence, these

claims do not define any feature at all.Â The subject of the claims 1 to 5 are not clearly based on the matter disclosed in the complete specification of

the patent.Â The patentee has claimed that the fuel cell generating 1.65 volts is connected to a 40 foot RS engine along with a 200 HP traction

motor.Â This is a hypothetical theory without any backing of clinical data and or prototypes.Â It is common knowledge that to power a normal car

engine, a battery with a voltage of 12.6 volts is required to generate enough current for the engine to start and/or for cranking.Â The patentee has in

no way described the methodology to start an electric vehicle with a supply of 1.65 volts only, which annihilates his claims 1 to 5 in entirety.Â The

claims 1 to 5 do not define any feature of a fuel cell vehicle rather a mere construction of a fuel cell battery which is known since ages and which

stands anticipated in reference to Annexures â??Lâ? to â??Râ?.Â The applicant in any event does not use any fuel cell operated vehicle. The

applicant used Battery Electric Vehicles (BEVs) which uses normal lead acid batteries.Â On such consideration the petitioner has prayed for

recalling of the order dated 17th June, 2015.

The plaintiffs are represented by plaintiff No.2.

The plaintiff no.2 appeared in person and argued on behalf of the plaintiffs.

It is submitted on behalf of the plaintiff that the plaintiff No.2 is a holder of a patent having invented â??an idea of making a fuel cell (battery)â?. The

engine of the vehicle is powered by a chemical reaction between the zinc and oxygen and â??it is a Fuel cell (Battery)â?. The invention relates to a

fuel cell system and vehicle mounted with such system.Â The object of the invention is to provide a fuel cell system in which electro chemical cells are powered by the oxidation of Zinc with oxygen from air. It is to provide a fuel cell system in which the cathode is made of porous carbon which absorbs oxygen from the air.Â It is to provide a fuel cell system in which a rechargeable fuel cell zinc air has high energy density vis-a-vis short cycle life and to provide a vehicle engine in which a fuel cell system produces the pollution free vehicle and increases the durability of the engine and the engines are safe with a long run time and light weight. This technology also increases the durability of the engine.Â The said engine can be used in cars as well as other vehicles like three wheelers, apart from water pump sets and generators and also used as an alternative from a present internal combustion fuel engine.Â Â Â The plaintiff has referred to the Registration Certificate being patent NO.254875, granted in favour of the plaintiff with retrospective effect from 2nd May, 2005.Â The plaintiffs have referred to final order passed by the Assistant Controller of Patent and Designs in compliance of an order passed by a Patna High Court directing the Assistant Controller to reconsider the grant of patent in connection with the invention made by the plaintiffs afresh.Â It is submitted that on reconsideration, the Assistant Controller has granted patent over 6 (Six) claims subject to deletion of claims 7 and 8 and in view thereof, the plaintiffs have patent over 6(six) claims.

The present suit does not relate to any claims based on claim 7 and 8. The certificate clearly shows that the patent has been granted to the patentee for an invention entitled â??a fuel cell system and an efficient eco-friendly vehicle mounted with fuel cell systemâ? as disclosed in the application, for a term of 20 years from 2nd May, 2005.Â This certificate was granted on reconsideration of the patent in terms of the order of the Patna High Court.Â It is submitted that the literature relied upon by the applicant is in relation to an invention of zinc air battery.Â The technology in both the inventions are different inasmuch as the invention is not merely with regard to a battery but the entire process through which it is functioning namely, fuel cell system and an efficient ecofriendly vehicle mounted with fuel cell system.Â It is an integrated whole having a different technology.Â There may be some common elements such as a dynamo and other essential parts, that are required for an ignition of a vehicle, but what is to be considered

is the technology that is applied to make it ecofriendly and the fuel cell system introduced in a vehicle to make it an efficient eco-friendly vehicle.Â It

is submitted that none of the drawings and the documents disclosed are same or similar to the invention made by the plaintiffs and they operate in

completely different areas with different technology.

It is submitted that the document disclosed at Page 81 of the petition in Annexure-M does not contain any patent inasmuch as the said document was

only available in 2016 and published in 2016 whereas the patent of the plaintiffs is of 2005. The applicant has not been able to show that fuel cell

battery had ever existed prior to 2005.Â None of the literatures disclosed in the petition would show that similar technology was applied earlier.Â

Apart from questioning the existence, validity and relevance of such documents it is incumbent upon the applicant to show that similar technology was

in existence when patent was granted and in this regard reliance is placed on Paragraph 40 of Sandeep Jaidka (Supra).

The plaintiff has accordingly prayed for dismissal of the petition.

The Patents Act, 1970 deals with invention. It is an invention that is patentable. Invention is defined in Section 3(j) to mean a new product or process

involving an inventive step and capable of industrial application. Inventive step is defined under Section 3(j) to mean a feature of an invention that

involves technical advance as compared to existing knowledge or having economic significance or both, and that makes the invention not obvious to a

person skilled in the art. The Act in Section 2(l) defines â??new inventionâ?. It means any invention or technology which has not been anticipated by

publication in any or used in the country or elsewhere in world before filing of patent application with complete specs. It is a reward to a person who

has invented a new and useful article or an improvement of an existing article or a new process of making an article. Once patented, he has an

exclusive right. It is a monopoly right for a limited duration in respect of an invention.

The object of the patent law has been succinctly stated in Bishwanath Prasad Radhey Shyam v. Hindustan Metal Industries reported at (1979) 2 SCC

511 at 517 in the following words:-

â??The object of patent law is to encourage scientific research, new technology and industrial progress. Grant of exclusive privilege to own, use or

sell the method or the product patented for a limited period, stimulates new inventions of commercial utility. The price of the grant of the monopoly is

the disclosure of the invention at the Patent Office, which after the expiry of the fixed period of the monopoly, passes into the public domain.

The fundamental principle of patent law is that a patent is granted only for an invention which must be new and useful. That is to say, it must have

novelty and utility. It is essential for the validity of a patent that it must be the inventor's own discovery as opposed to mere verification of what was,

already known before the date of the patent.â??

As a corollary, an invention which has been patented once cannot be patented a second time even by the same person.

The question whether a particular invention is new or useful is often extremely difficult to decide as it depends on state of prior art in the particular

field which includes prior publication in the subject and prior user.

The word â??inventionâ?? is an abstract concept and it derives its meaning from the context and circumstances in which it is used.Â It has to be

decided in the context of the state of the art which existed at a point of time in the past which may be even a few years.Â The question whether

there is an invention is a question of fact in each case.Â A new and useful application of an old principle may be a good subject matter.Â An

improvement on something known may also afford subject matter: so also a new combination of different matters already known.Â The mere

collocation of two or more things, however, without some exercise of the inventive faculty in combining them is not subject matter for a patent.Â In

the case of a combination the inventor may have taken a great many things which are common knowledge and acted on a number of principles which

are well known.Â If he had tried to see which of them, when combined produce a new and useful result, and if he succeeds in ascertaining that such

a result is arrived at by a particular combination, the combination will, generally speaking, afford subject matter for a patent.Â (Lallubhai Chakubhai

Jariwala v. Chimanlal reported at AIR 1936 Bom 99 at 104105)

It is well settled that patent protection cannot be obtained for a mere idea.Â (See IBM Corpâ??s Appln. (1980) FSR 564 at 568).

Patent law deals with the concept of functional and design inventions in order to encourage investment in new technology and invention.

The principle of the Patent Law is that an idea or discovery as such is not patentable. It is the practical application of an idea or discovery which leads to patentability. It leads to patentability even if, as frequently happens, the practical application of the discovery is inherent in the discovery itself or is obvious once the discovery has been made and stated. (See Gale's Appln. (1991) RPC 305 (CA) at 323.

It is trite law that you cannot patent a discovery, but if on the basis of that discovery you can tell people how it can be usefully employed, then a patentable invention may result. This would be the case even though once you have made the discovery the way in which it can be usefully employed is obvious enough. (At p. 324 supra, quoted from Genentech's Patent (1987) RPC 553 at 556 approved by CA)

In P.L.G. Research v. Ardon, (1993) FSR 197 at 218, Aldous, J., stated as follows:-

Novelty has been a requirement of patent law for hundreds of years and there are a number of well known authorities which help to illustrate

what must be established. They are still good law. It is sufficient for me to refer to the judgment of the Court of Appeal in the General Tire v.

Firestone Tyre (1972) RPC 457 at 485. In that case the Court of appeal stated:

The earlier publication and the patentee's claim must each be construed as they would be at the respective relevant dates by a reader skilled

in the art to which they relate having regard to the state of knowledge in such art at the relevant date. The construction of these documents is a

function of the court, being a matter of law, but since documents of this nature are almost certain to contain technical material, the court must, by

evidence be put in the position of a person of the kind to whom the document is addressed, that is to say, a person skilled in the relevant art at the

relevant date.

On a plain reading of Section 107 with Section 64 of the Patents Act, it is clear that in a suit for infringement the defendant can always take the

grounds on which such patent may be revoked under Section 64 as grounds for defence. The said Section is intended to protect an aggrieved party

who is otherwise entitled to use the patent for the registration. It is possible that at the time of granting a patent, the Controller may not have the full

facts before him and during examination of the patent all the necessary

information and documents may not be available to him.Â The persons who may have opposed the grant may not be aware of a prior invention or inadvertently did not refer to a prior published document which would show that a complete specification of another patent was already in existence or that the invention so far as claimed in any such claim of the complete specification is obvious and does not involve any innovative step having regard to what was publicly known or publicly used in India or what was published in India or elsewhere before the priority date of the claim. The mere non-filing of any objection before the grant would not disentitle an aggrieved party to take the defense available to such party under Section 64 of the Act.Â This is a statutory right given to an aggrieved party. In Industrial Gases Ltd. (supra) this right was recognized in paragraphs 18 and 30 of the report which reads:

Â 18. There are certain broad principles in the background of which the facts of this case will have to be considered.Â The first is that a patent is granted only in respect of an invention (vide Section 6 and 7 of the Act). The second principle is that in a suit for infringement of a patent every ground on which the patent may be revoked is available as a ground of defence. (vide Section 107).

30. The mere fact that the petitioners are the registered owners of the patent does not give rise to any presumption of validity of the patent. As observed by the Master of the Rolls:

It seems to me that when you have, as here, a patent of such long standing, widely used and much respected throughout the world, with no citation against it and not challenged over all these years until now, there is prima facie evidence of the validity of the patentâ??.

The said judgment was affirmed by the Honâ??ble Division Bench.Â The said judgment is also reported in the same volume at page 368.Â The same view is expressed by the Honâ??ble Division Bench of Delhi High Court in Franz Xaver Huemer (supra) in paragraph 31 of the report which reads:

â??31. It is said that in the law of patents, it is not sufficient merely to have registration of a patent. The Court must look at the whole case, the strength of the case of the patentee and the strength of the defense such as those falling under Section 107, read with Section 64â??.

In short, if the specifications are in public domain prior to the application for patent under Section 64 of the Patents Act, no patent can be granted.Â

There are two limbs of attack to the patent, firstly, that the claim of the complete specification was already in the public domain prior to the date of

registration and, secondly that there is no invention.Â As a corollary to it, the complete specification does not sufficiently and fairly describe the

invention and the method by which this to be performed.

In order to appreciate the objections raised under Section 64 of the Patent Act it is necessary to discuss the legal principles with regard to the

construction of specification and obviousness.

The general rules and principles of construction governing all documents apply to patent specification. The court may, and indeed should, have regard

to the surrounding circumstances as they existed at the date of publication of the specification (or perhaps the priority date). Â Those circumstances

sometimes described on the matrix in a commercial context, would include common general knowledge.Â The specifications should be construed in

the light of circumstances existing at the date of publication of the complete specification. When so construed, a claim defines and delimits the

monopoly claimed. It is not then permissible to make further reference to the description of the invention contained in the body of the specification to

put a gloss upon the claim extending or restricting the ambit of the monopoly beyond or within its scope indicated by the language of the claim itself as

that language has been construed.

The ambit of the monopoly of any claim in a patent must be discovered from the language of the claims itself. This language is, however, to be read

and construed as part of the specification as a whole.Â The whole document must be read together, the body of the specification with the claims. But

if a claim is expressed in clear language, the monopoly sought by the patentee cannot be extended or cut down by reference to the rest of the

specification. The specification must be read with the eye and understanding of the kind of person to whom it is addressed, that is to say, a man

competently skilled in the art to which the subject matter relates. A specification may be considered as addressed at any rate primarily to the person

who would in normal course have to act on the directions given for the performance. These persons may be assumed to possess not only a reasonable

amount of common sense, but also complete knowledge of the art or arts which have to be called into play in carrying the patentee's directions

into effect. (See. *Glaverbel v. British Coal Corp.* [1994] RPC 443 at 485-487, *Peseidon Industry AB v. Cerosa Ltd.* [1982] FSR 209 (CA) at 212

Buckley, L.J. Glaverbel v. British Coal Corp. [1995] RPC 255 at 268-270 (CA)).

Obviousness defeats a claim of novelty. A Patent is granted only for an invention and that which is obvious is not an invention.

In *Keller and Richter's Patent*, (1975) RPC 75 at 90-91 Whitford, J. Observed:

"The question of obviousness should be essentially a practical sort of question decided by a practical man instructed as to the information which

was available. As matters stand, if one is questioning the obviousness of an alleged invention it is necessary to consider the effect of a prior art

disclosure which it must be assumed has come to the notice of a worker in the field. It may, in certain circumstances, be legitimate to consider two

pieces of prior art disclosure read together."

In *Parks-Gramer Thornston* [1966] RPC 407 at 412 Diplock, L.J. observed:-

"Obviousness is not a concept which can be clarified by elaborate exegesis, and we do not propose to cite the many cases to which we have

been referred in which various judges at various times, both before and after the phrase "is obvious and does not involve any inventive step" was

first inserted in the Patents Acts, have expressed the concept of obviousness, or lack of subject-matter as it was previously called, in various ways

appropriate to the particular invention whose validity was challenged on this ground."

In *General Tire case* [1972] RPC 457 at 497 it was stated:

"Obvious is, after all, a much used word and it does not seem to use that there is any need to go beyond the primary dictionary meaning of

"very plain".

In the background of the aforesaid discussion at this juncture I advert to the relevant contextual facts required to be dealt with in this application.

The record depicts that the application in respect of patent no.254875 was made on 2nd May, 2005 and the patent was granted and sealed on 28th

February, 2012. Initially it appears that the patent was refused. The plaintiffs challenged the order of the controller before the High Court at

Patna and in terms of the order passed by the High Court on 17th October, 2012, the matter was considered and patent was granted over 6 claims

subject to deletion of claims 7 and 8.

The application for patent contained a complete specification and in the application the petitioner has stated the nature of the invention under the

heading "field of the invention" which reads:-

"The present invention relates to a fuel cell system and vehicle mounted with this fuel cell system. More particularly, the present invention

relates to an efficient eco-friendly vehicle engine in which electro chemical cells in powered by the oxidation of zinc with oxygen from the air.

Furthermore, this invention also relates to a vehicle engine in which the cathode is made of porous carbon which absorbs oxygen from the air.

Moreover, this invention also relates to a vehicle engine in which a rechargeable fuel cell zinc Air has high energy density v/s short cycle life.

Furthermore, this invention also relates to a vehicle engine which results in a pollution free vehicle and increases the durability of the engine with the

engine being safe with a long run time and light weight.

The summary of the invention and the detailed discussion of the invention as stated in the application by the petitioner are:-

"The present invention relates to a fuel cell system and vehicle mounted with this fuel cell system. More particularly, the present invention

relates to an efficient eco-friendly vehicle engine in which electro chemical cells is powered by the oxidation of zinc with oxygen from the air.

Furthermore, this invention also relates to a vehicle engine in which the cathode is made of porous carbon which absorbs oxygen from the air.

Moreover, this invention also relates to a vehicle engine in which a rechargeable fuel cell zinc Air has high energy density V/s short cycle life.

Furthermore, the invention also relates to a vehicle engine which produce the pollution free vehicle and increases the durability of the engine and the

engine are safe, long run time and light weight.

Detailed description of the invention While the invention is particularly pointed out and distinctly claimed in the concluding portions herein, a preferred

embodiment is set forth in the following detailed description which may be best when read in connection with the accompanying drawing.

The other object of the present invention is to a fuel cell system and vehicle

mounted with this fuel cell system.

Still other object of the present invention is to provide a fuel cell system in which electro chemical cells is powered by the oxidation of zinc with

oxygen from the air.

Still another object of the present invention is to provide a fuel cell system in which the cathode is made of porous carbon which absorbs oxygen from the air.

Yet another object of the invention is to provide a fuel cell system in which a rechargeable fuel cell zinc Air has high energy density V/s short cycle life.

Yet another object of the invention is to provide a vehicle engine in which a fuel cell system produces the pollution free vehicle and increases the durability of the engine and the engine are safe, long run time and light weight.

One more objective of the present invention is that during the years great resources were invested to improve engines in purpose to increase its usefulness, reduce fuel consumption and to reduce emission of harmful gases because of the strict ecological demands.Â Despite all efforts, although great results were achieved, fuel consumption, engine exploitation and harmful gases emission still haven't achieved desired level.

The zinc air engine; a full sized all electric, zero emission engine utilizing zinc air fuel cell technology, and to assess the applicability of this technology

for transit.Â This includes selecting an appropriable chemical defining the engine configuration developing the propulsion system designs and controls,

fabricating necessary hardware and conducting installation and system integration.Â In phase-1, the Zinc Air fuel cell technology was integrated into

a standard RTS 40 foot transit engine.Â It was designed to meet the standard engine performance specifications including grade climbing and

acceleration.Â The propulsion system considered of a battery hybrid configuration.Â The zinc Air battery supplied 312 KWH of energy and

contributed up to 99KW to the power requirement A NICD battery pack of 22 KWH supplied up to 125 KW of power and allowed far energy

recuperation during engine deceleration together the batteries were capable of supplying propulsion power for the 200 hp traction motor.

FIG. 1 shows a diagrammatic view of a zinc Air fuel cell.

The reference no of the fig.1 of the instant invention has been illustrated below:

- A) shows the air access hole;
- B) shows the cathode can;
- C) shows the air distribution membrane;
- D) shows air diffusion Teflon membrane.
- E) shown Hydrophobic Teflon layer;
- F) shows Carbon pressed nickel plated screen;
- G) shows the separator;H) shows the insulator;
- I) shows the Anode can;
- J) shows the Zinc anode

FIG.2 shows the diagram of the Engine:

FIG.3 shows the battery configuration in which zinc get, separator cathode, anode gasket, outer can, air hole, seal distribution paper and seal tab are shown.

FIG.4 shows the diagrammatic view of zinc anode cell and zinc air cell.

FIG 5 and 6 shows the diagrammatic view of zinc anode of zinc air cell.

FIG 7 shows the diagrammatic view of the prismatic construction of zinc air battery.

FIG 8 shows the zinc air battery.

FIG 9 shows the anode slurry, negative terminal, nylon insulator, separator membrane, air cathode, air distribution membrane, positive can and sealant.

FIG 10 shows the accessories of the fuel cell

FIG 11 shows the typical discharge characteristic curve in close circuit voltage vs hours of service.

FIG 12 shows the negative cap and negative electrode (zinc), gasket, separator, hydrophobic membrane, positive electrode (oxygen), diffusion paper, air hole, positive case and seal tab.â??

The other relevant statements made in the application in relation to the patent are:-

â??This engine of the vehicle is powered by a chemical reaction between zinc and oxygen hence it is pollution free.Â This technology also increases

the durability of the engine.Â The said engine can be used in cars as well as

other vehicles like three wheelers, apart from water pump sets and generators and also used as a alternative from a present internal combustion fuel engine. The zinc air fuel cells (mechanically rechargeable) are electro chemical cells powered by the oxidation of zinc with oxygen from the air. These cells have high energy densities and are relatively inexpensive to produce. They are used hearing aids and in older cameras that previously mercury batteries. They may be an important part of future zinc economy. As a rechargeable fuel cell zinc Air has high energy density V/s short cycle life, low power density and low efficiency. The cathode of this is made of porous carbon which absorbs oxygen from the air. The zinc air cell use a zinc anode and the electrolyte is a base (rather than an acid) typically potassium hydroxide. Particles of zinc are mixed with an electrolyte (usually potassium hydroxide solution): water and oxygen from the air react at the cathode and from hydroxyl is which migrate into the zinc paste and from zincate $Zn(OH)_4$ at which point electrons are released and travel to the cathode. The zincate decays into zinc oxide and water is released back into the system. The water and hydroxyl from the anode are recycled at the cathode, so the water serves only as a catalyst. The reaction produce a maximum voltage level of 1.65 volts. But this is reduced to 1.4-1.35 by reducing the air flow into the cell: this is usually done for hearing aid cells to reduce the rate of water drying out. The zinc air fuel cell usually refers to a zinc air battery in which zinc fuel is replenished and zinc oxide waste is removed continuously. This is accomplished by pushing zinc electrolyte paste or pellets into an anode chamber, waste zinc oxide is pumped into a waste tank or bladder inside the fuel tank, and fresh zinc paste or pellets are taken from the fuel tank. The zinc oxide waste is pumped out a refueling station and sent to a recycling plant.

Alternatively this term may refer to an electro chemical system in which zinc is used as a co-reactant to assist the reformation of hydrocarbon fuels on an anode of a fuel cell zinc air batteries have properties of fuel cells as well as batteries; the zinc is the fuel the rate of reaction can be controlled by controlling the air flow and used zinc electrolyte paste can be removed from the cell and replaced with fresh paste.

The said product can be fitted in a car engine (based on the model) and the

market price of the engine is lower than any other engine.Â The chemicals used herein are inexpensive and can be used as a bulk or can be used for a far longer period with regard to any other battery.Â The said product does not cause any NOx gases emission so the product is best alternative for the global climate change and far commercial usage.Â The zinc oxide is the waste and can be used for other purposes like production hydrogen gas after the formation of zinc oxide so it is the best alternative keeping an eye on the future global need.â??Â

In the said application patent has been claimed in respect of 8 claims. They are:-

- 1) A fuel cell system mounted on an eco-friendly vehicle which comprises.
 - a) Zinc anode
 - b) Insulator
 - c) separator
 - d) carbon pressed nickel plated screen
 - e) hydrophobic Teflon
 - f) air diffusion Teflon layer characterized in that porous carbon cathode absorbs oxygen from air and cell produces maximum voltage level of 1.65 volt.
- 2) A fuel cell system as claimed in claim 1 where in the anode is made of zinc.
- 3) A fuel cell system as claimed in claim 1 where in the voltage of 1.65 volt is reduced to 1.4-1.35 volt by reducing the air flow into cell.
- 4) A fuel cell system as claimed in claim 1 which has high energy density V/s short cycle life.
- 5) A fuel cell system as claimed in claim 1 which produces the pollution free vehicle and increase the durability of the engine and the engine are safe, long run time and light weight.
- 6) A vehicle containing a fuel cell system as claimed in Claim 1 which is eco-friendly and pollution free.
- 7) A fuel cell system substantially as hereinbefore described with particular reference and accompanying drawing.
- 8) A vehicle containing a fuel cell system substantially as hereinbefore described with particular reference and accompanying drawing.

The controller on 14th December, 2012 passed an order in terms of the direction of the High Court for reconsideration of the grant of patent. The

relevant observations are:-

On request for reconsideration for grant of patent as per the direction of Hon'ble High Court by the Ld. Inventor, I heard him in the interest

of Justice regarding the intricacy of the instant invention and come to know that it is not a Fuel less engine/vehicle but it is Fuel cell (Battery), where

the novelty and inventive step of the instant invention lies and that Fuel cell (battery) is mounted on the vehicle and the vehicle is eco-friendly

(obviously). Also Ld. Inventor admitted that the same battery have be shown/given in the complete specification, claims and also in the reply to First

Examination Report. It has further been submitted that it is not an engine which is against 3(a) of the Patents Act 1970 because it has both Source

& Sink. Source is the Fuel cell and Sink is the output.

Subsequently on Cross-examination of Application and reconsidering all these facts on record as well the submissions made by the Ld. Inventor, it is

hereby concluded that Patent may be granted to the Ld. Inventor over 6 claims as per the provisions of the Patents Act, 1970. It is in order for grant

subject to deletion of Claims 7 and 8 (omnibus claims, not allowed as per section 10(4)(c) of the Act) and final submissions of retyped pages

accordingly. Letter of Patent will be issued after submission of retyped pages and uploading of the claims in the emodule.

Superseding my earlier order dated 04.12.2012 in view of submissions made by the Ld. Inventor and in the interest of Justice, I hereby complied with

the entire requirements as directed by the Hon'ble High Court in the matter of CWJC 17429 of 2012 after hearing the Ld. Inventor.

The plaintiff applied for a fuel cell system and an efficient eco-friendly vehicle mounted with a fuel cell system. In the application the plaintiff

has stated that the invention relates to a fuel cell system and vehicle mounted with this fuel cell system. The invention relates to an efficient eco-

friendly engine in which electro chemical cells are powered by the oxidation of zinc with oxygen from the air. Moreover, this invention also relates

to a fuel system in which the cathode was made of porous carbon which absorbed oxygen from the air. This invention also relates to a vehicle

engine in with a rechargeable fuel cell zinc air battery which has high energy density as opposed to short cycle life. The vehicle engine relates to a

pollution free vehicle and claims to increase durability of the engine with the

battery being saved with a long run time and light weight.Â This is in short is the process involving an inventive step as claimed by the plaintiffs.Â In the application, the plaintiff has initially made 8 claims out of which, on reconsideration, claim No.1 to 6 were allowed.

The measure of a system efficiency cannot be decided in vacuum.Â It has to be judged in term of certain pre-defined or newly defined parameters.Â The performance metric in relation to the invention claimed is not disclosed.Â The parameter of efficient eco-friendly vehicle is not disclosed.

The claims 4 & 5 are related to the outcome and/or result of a system ordinarily a fuel cell system provides features like high energy density and less pollutant to the environment. The claims does not show any degree of improvement compared to the existing system. It is incumbent on the plaintiffs to apply Duracell battery or any other existing battery on a eco-friendly mounted vehicle and then to compare its performance with the system.Â The invention as claimed is not significantly different from the existing system as is evident from the literature disclosed by the applicant.Â It is however, not to say that improvement on the existing system with special features enhancing performance or involving technical advance as compared to existing knowledge or having economic significance or both would not be an inventive step.

The plaintiffs have objected to the reliance being placed on literature published in Wikipedia.

The Supreme Court of India in M/s. Ponds India Ltd. v. Commissioner of Trade Tax reported at (2008) 8 SCC 369, has observed:-

â??Wikipedia, like all other external aids to construction, like dictionaries etc, is not an authentic source, although the same may be looked at for the purpose of gathering information.â??

The United States Court of Appeals of Tennessee, Eastern Section, in English Mountain Spring Water Company v. Loren L. Chumley, Commissioner of The Tennessee Department of Revenue, has observed:

â??Wikipedia is a multilingual, Web-based, free-content encyclopaedia. It is written collaboratively by volunteers with wiki software, meaning articles

can be added or changed by nearly anyone. It appears that the only case in the United States that has ever referenced Wikipedia is a

nonpublished/nonciteable California case. See *Patel v. Shah*, No. G033741, 2004 WL 2930914, (Calif. App. 4 Dist. Dec. 17, 2004). Given the fact that

this source is open to virtually anonymous editing by the general public, the expertise of its editors is always in question, and its reliability is

indeterminable. Accordingly, we do not find that it constitutes persuasive authority.â??

However, the other prior published literature relied upon by the petitioners clearly shows that no technical improvement is achieved by the patent and it

lacks inventive step.

The proposed Fuel Cell system uses cathode made up of porous carbon which had already been used in existing fuel cells since it is a good conductor

of electricity and resistant to attack by both acid and alkaline electrolytes. Hence this invention claims obvious fact.

The zinc anode used in the proposed Fuel system is a well recognized anode material in existing zinc air battery and fuel cells. Hence this invention

also claims obvious fact.Â Although zinc has low electrical resistivity, during anodic discharge of the battery, zinc corrodes in alkaline solution,

producing hydrogen, giving rise to charge losses.Â There is no mention of significant improvement of any existing technology in this respect.Â More

clearly, any of the innovative methods like, alloying zinc with other metals, addition of aluminium oxide to zinc, coating the zinc metal with other

materials or mixing the alkaline electrolyte with organic corrosion inhibitors etc. have not been used in the proposed Fuel Cell system.

The Teflon masks used in the proposed Fuel Cell system are already in use with existing Fuel Cell systems as gaskets that confine the gas flow to the

active area of the fuel cell and work as sealing agent in the stack assembly of the cell.Â Â This claim is also an obvious fact.

The claims 4 and 5 are related to the outcome or result of the invention.

However, in this invention, performance of the proposed Fuel Cell system has not been evaluated in terms of its operating parameters such as,

Operating

Pressure, Operating Temperature, Flow Rates of Reactants and Humidity of Reactants.Â Influences of these operating parameters on the generated

output power of the fuel cell have not been analysed failing which it is not possible to find which of these operating parameters would require better

control to ensure optimal power output and higher efficiency of the aforementioned system.Â Hence the term â??Efficientâ? cannot be claimed as far as environmental issues are concerned as the existing fuel cells are already eco-friendly in nature.Â This does not show any significant improvement to existing technology.

The above discussion strongly recommends that the proposed Fuel Cell system neither involves any novel invention nor any enhancement or advancement of existing technology.Â The above claims can simply be treated as duplication of the known devices.

The claims are obvious to a person skilled in the art. The claim is to be treated as invention provided it has resulted in an improvement or involving a technical advance as compared to the existing knowledge.

It is also significant to mention that the grounds taken for defence in the suit for infringement have not been dealt with at all in the affidavit in

opposition.Â The plaintiffs have referred to irrelevant documents to sustain the interim order by this Court. There is no specific denial to any of the

grounds mentioned in the petition.Â The grounds for revocation have remained uncontroverted. However, I have examined the defence after taking

into consideration the claims made in the application for grant of patent to arrive at a finding that such claims were in the public domain and the

invention so far as claimed of the complete specification is obvious and does not involve any inventive step.Â The plaintiffs have argued that the order

of injunction is continuing since 17th January, 2015 and the applicant has not opposed it either at the time when the application of patent was

considered or at the time when the interim order was confirmed and hence has lost its right to recall the said order.Â I am not inclined to accept such

submission as the order was ex parte and as subsequently transpired a large number of defendants have not been properly described in the plaint for

which the application for amendment of the plaint was filed and allowed on 8th May, 2018.

Moreover, if it appears to the court on examination of the document that the claim of patent is doubtful, the court cannot sit idle. The question of

validity of the plaintiffâ??s patent no. 254875 is not free from doubt at this prima facie stage. I am prima facie satisfied as to the invalidity of the

claim of patent. There are serious grounds for doubting the validity of the claim

as discussed earlier.

On the aspect of the injunction it is also necessary to record that there is no proof of wide user or world wide use of the patent as claimed.Â The

mere registration of the patent is not sufficient.Â The test to be applied in the instant case is whether there are sufficient materials to show that the

plaintiff has a "real prospect of succeeding" in its claim for permanent injunction. The plaintiffs have failed to establish a seriously arguable

case.Â The court is required to consider the balance of convenience.

In Franz Xaver Huemer (supra) at Paragraphs 31 to 33 laid down the law in the following words:-

"31. It is said that in the law of patents, it is not sufficient merely to have registration of a patent. The Court must look at the whole case, the

strength of the case of the patentee and the strength of the defense such as those falling under Section 107 ,read with Section 64.

32. The need to establish prima facie has been emphasized in recent cases in England and in India. The Court has to consider whether there is prima

facie proof of infringement (Lord Denning M. R. & Megaw LJ Hubbard v. Vosper, (1972) 1 All ER 1023. Prima facie proof of validity is different

from prima facie proof of infringement as stated by Sultan Singh, J. in NRDC Co. v. DCM Ltd., AIR 1980 Delhi 132. In that case, the learned Judge

quoted Terrel on the Law of Patents (12th Ed. para 830) : (at p. 135 of AIR) :

The plaintiff must first establish such facts as will satisfy the Court that there are strong prima facie reasons for acting on the supposition that the

patent is valid. The most cogent evidence for this purpose is either that there has been a previous trial in which the patent has been held to be valid, or

that the patentee has worked and enjoyed the patent for many years without dispute", or may be that as between the parties the plaintiff is relieved

from the onus of establishing validity, as where the defendant has admitted it or is so placed in his relationship to the plaintiff as to be estopped from

denying it.

In Surendra Lal Mahendra Jain v. Glazers, 1981 PTC 112 (117) it was held that a prima facie case about the existence of the monopoly, right and its

infringement must be established. (See also Ram NarainKher v.Ambassador Industries,)

"Balance of convenience.

33. Balance of convenience has also an important role to play. Stultification of defendants investment, loss of employment, public interest in the

product (such a life saving drug), product quality coupled with price, or the defendant being smaller in size, may go against the plaintiff. Cases of a

'Bridgehead (only a short period to go before expiry of plaintiff's patent), parties being of equal size, -may go in favour of plaintiff. Case of snowball

(more future infringements) may not tilt the balance in favour of plaintiff. (See Halsbury's Laws of England, 4th Ed, Vol. 35, para 623). Again, even

delay of a few months in some cases has led to refusal of injunction. In Minnesota Mining & Manufactory v. Johnson & Johnson, 1971 FSR-Supply

(1) at 623, the delay was seven months and injunction was refused.â??

In the instant case there is no material on record to show that the plaintiff has actually used the patented invention in India.Â There appears to

complete non-use of the patented invention by the plaintiff.Â In Franz Xaver Huemer (supra) it was held: â??a plaintiff who has registered patent in

India but has not used them in India cannot in equity seek temporary injunction against the respondentâ?. Similar view is expressed in Industrial Gases

Ltd. (supra) in which it is stated: â??I am also of the opinion that the balance of convenience is not in favour of granting an injunction as prayed by

the petitioner.Â The petitioners have not shown that they have put the patented product on the marketâ?.Â Although mere non-use of the patent

may not disentitle a plaintiff to seek injunction relied but such prayer needs to be considered on assessment of the whole case.Â As observed in

Industrial Gases Ltd. (supra) : â??But the use of the patent is relevant not only on the question of its validity but also on the question of balance of

convenience [See. Ibrium Case (supra) as well as Boots Pure Drug Co. (India) Ltd. v. May & Baker Ltd. 52 CWN 253 and Godrej Soaps Ltd. v.

Hindustan Lever Ltd., 98 CWN 131 paragraphs 29 and 37 (DB)]

The applicants are already in the trade and have been manufacturing and selling their battery operated electric cycle rickshaw.Â Â The applicant has

raised serious issues with regard to the validity of the patent.Â I am prima facie satisfied with regard to the invalidity of the patent.Â

Under such circumstances the interim order passed on 17th June, 2015 is recalled subject to the conditions indicated below.

The applicant shall furnish true and faithful quarterly statement of accounts to

the Registrar, Original Side, High Court at Calcutta, with regard to the business in relation to the device/apparatus already manufactured by them since inception.Â The initial statement shall be from the date it commenced its business till 30th June, 2018 positively by 14th August, 2018 duly certified by its auditor.Â The subsequent statement of each quarter shall be furnished within the 15th of the next succeeding month.Â The applicant shall file an undertaking by way of an affidavit to pay the damages, if at the final stage the court arrives at a finding that the applicant has actually infringed the patent of the plaintiff upon prior service to the plaintiffs.Â The said undertaking shall be filed by 31st July, 2018, in default, the interim order passed on 17th June, 2015, shall revive. The defendant No.2 shall file its written statement with or without counterclaim within four weeks from date. The said directions are peremptory. Urgent Xerox certified copy of this judgment, if applied for, be given to the parties on usual undertaking.