(2010) 11 IPAB CK 0009

In the Intellectual Property Appellate Board

Case No : M.P. No. 82 Of 2010 In ORA No. 43/2009/PT/CH

Enercon India Ltd. APPELLANT

Vs

Aloys Wobben RESPONDENT

Date of Decision : 16-11-2010

Acts Referred:
Patents Act 1970 — Section 2(1)(s), 2(1)(m), 2(1)(j), 2(1)(ja), 2(1)(t), 13(4), 25, 25(3)(b), 64, 64(1)(f), 64(1)(i), 117D

Citation : (2011) 1 MIPR 379

Hon'ble Judges : S. Usha, J;S. Chandrasekaran, Technical Member

Bench : Division Bench

Final Decision : Allowed

Judgement

S. Chandrasekaran, Technical Member

1. This is an original application for revocation filed under Section 64 read with Section 117 D of the Patents Act, 1970 (herein after referred to as the

Act) for revoking the patent No. 202885 dated 12-11-2002 granted to the Respondent a German citizen.

2 The impugned Patent was filed on 12-11-2002 claiming the priority date 12-5-1999 and the Patent was granted on 2-2-2007 by the Patent Office

after due examination of the Patent application having the title ""Azimuth driver for wind energy plants"". The applicant is a Company registered under

the Companies Act 1956, a subsidiary of ENERCON GmbH. Germany, applied for the revocation of the Patent on the following grounds.

a. The subject matter of the Patent is obvious and does not involve any inventive step (Section 64 (1) f);

b. The scope of the claims is not sufficiently and clearly defined. [Section 64 (1) (i)].

3 The applicant stated that they are one of the foremost leaders in the wind energy sectors in India and they manufacture and install wind turbines all

over India and thus they are an interested person within the meaning of the Section 64 of the Act.

4. The Respondent challenged the competency of the signatory to the application for revocation and the same was heard by this Appellate Board and

passed an order disposing the matter to be decided along with the main matter. Aggrieved by this order, the Respondent appealed in the Madras High

Court, which was heard and disposed of by the Hon'ble High Court directing this Appellate Board to consider and dispose of this preliminary issue

along with the main matter.

5. On completion of the pleadings, the matter was listed for final hearing on 02-11-2010 before this Appellate Board. Shri R. Parthasarathy advocate

appeared for the Applicant and the Respondent was represented by the advocate Shri Samaresh Chakrabarti.

6. The Respondent filed a M.P. No. 82/2010 on 2-3-2010 questioning the locus standi of the applicant to maintain the present revocation application.

Therefore this has to be considered first and disposed of. Before considering this question of locus of the signatory, let us look into the facts and

background of the case as to its origin briefly.

a. The applicant is a joint venture company. The applicant is involved in the manufacturing of wind turbine generators and setting up of wind farms on

a turnkey basis. There are two shareholder groups of the applicant company, viz., Enercon GmbH, a company incorporated under German law owns

56% of the shareholding of the applicant company as a first shareholder. The members of the Mehra family own the remaining 44% of the

shareholding of the applicant company as a remaining shareholder.

b. There are 4 members on the board of the Petitioner,

â?¢ 2 representatives of Enercon GmbH

â?¢ 2 representatives of the Mehra family

â?¢ The Chairman of the board is Dr. Aloys Wobben and the Managing Director of the applicant company is Mr. Yogesh Mehra.

â?¢ The actual day to day management of the affairs of the applicant company is to be carried out by the Managing Director of the company in India.

c In 2007, Enercon GmbH filed a petition under the Companies Act, 1956 in the Company Law Board, Principal Bench, New Delhi alleging

oppression and mismanagement of the affairs of the applicant company by the Mehra group members. On 29.10.2007 the Company Law Board

passed an interim order which directed ...."Status quo with regard to all the issues pending in the proceeding should be maintained and no action in

relation to the same shall be taken" (emphasis supplied). CLB further directed that ....."No changes shall be brought about in the managerial set up

and their responsibilities." On 19.5.2008 the CLB passed a further order stating that no further board meetings of the applicant company should be

convened without the leave of the Company Law Board thus freezing all the meetings except the day to day activities of the applicant company.

d The said revocation applications have been filed in January 2009. They were filed in the name of the applicant company and were signed by Mr.

Yogesh Mehra, the Managing Director of the applicant company. The counter statements were filed nearly after a year later by the Respondent.

Along with the counter statement, miscellaneous applications were also filed questioning the locus standi of Mr. Yogesh Mehra to sign the said

revocation applications for and on behalf of the applicant company. Mr. Yogesh Mehra has signed the revocation applications on the strength of a

Board resolution dated 26.4. 2007 which is quite evidently prior to the orders passed by the CLB dated 29-10-2007.

e The main arguments of the Respondent are as follows:

â?¢ The Board resolution dated 26.4. 2007, by which Mr. Yogesh Mehra is authorized to file proceedings on behalf of the applicant company is bad in

law since it falls foul of the orders dated 29.10.2007 and 19.5.2008 passed by the CLB;

â?¢ The Board resolution only authorizes Mr. Yogesh Mehra to manage day to day activities of the applicant company and under the general powers,

to defend the Company and file suits on behalf of the company on matters that may arise out of contractual laws, corporate laws, taxation laws or

any other statutory acts" but not to initiate these revocation proceedings;

â?¢ Mr. Yogesh Mehra having filed a suit in a derivative capacity in the Bombay High Court could not now file this proceeding on behalf of the

applicant company;

â?¢ That the validity of the Board resolution has been challenged before the Company Law Board.

â?¢ This Appellate Board having been formed substituting for the High Court as regards finalizing the applications for revocation of patents, this

Appellate Board like the High Court has the powers to decide on all the matters of law and those connected matters of legal disputes.

f The aforesaid contentions have been refuted by the applicant. The applicant's counsel referred to the Supreme Court of India case in ""Patel

Roadways Ltd. v. Birla Yamaha Ltd., (2000) 4 SCC 91"" to show how the Hon'ble Supreme Court of India has decided about ""a suit"".

g On perusing the entire details available in the records, it is seen that Mr. Mehra was authorized by the Board resolution dated 26-4-2007 to sign the

pleadings i.e the revocation applications. The present revocation applications have been signed by Mr. Mehra by virtue of the said Board resolution

dated 26.4.2007 which empowers Mr. Mehra to do so as is clear from the contents of the resolution produced before us. This Appellate Board cannot

decide upon the validity, legality and propriety of this Board resolution dated 26.4.2007 and this Appellate Board, in the absence of any judgment or

order of a competent Court of Law declaring the resolution to be null and void or staying the resolution, has to proceed on the footing and directions

given therein and assume that the said resolution dated 26.4.2007 is perfectly valid and legal. Counsel for the Respondent during the course of

arguments sought to urge grounds in support of the proposition that the resolution dated 26.4.2007 was not proper and legal. However as stated

hereinbefore the legality and/or validity of the Board resolution dated 26.4.2007 cannot be questioned in the present proceedings which are instituted

under the provisions of Section 64 of the Act. The jurisdiction to test the validity and legality of the Board resolution does not rest with this Appellate

Board. If that be so, then the obvious conclusion is that Mr. Mehra by virtue of the resolution dated 26.4.2007 is fully empowered to sign the suits /

pleadings including all these revocation applications. As such there is no substance in the contention of the Respondent that Mr. Mehra has no

authority to sign the pleadings. Further the contention of the Respondent is wrong that the applicant company cannot maintain the present revocation

applications.

h It was further contended by the counsel for the Respondent that the present proceeding is not a suit and as such the resolution dated 26.4.2007

cannot be taken to have empowered Mr. Mehra to sign the same. This argument too is without any substance. It cannot be said that the present

proceeding is not a suit especially in the light of the arguments of the counsel of the Respondent made already, that this Appellate Board is a Court for

all practical purposes, having regard to the nature of the powers and jurisdiction vested in it by statute, which appears that the Respondent is

contradicting his own arguments made already before us. Reliance can be placed in this regard on the law laid down by the Supreme Court of India in

Patel Roadways Ltd. v. Birla Yamaha Ltd., (2000) 4 SCC 91. The Hon'ble Supreme Court at paragraph 48 and 49 observed as follows:

i ""Suit, Action - 'Suit' is a term of wider signification than action; it may include proceedings on a petition.

49. From the above it is clear that the terms ""suit"" is a generic term taking within its sweep all proceedings initiated by a part for realization of a right

vested in him under law. The meaning of the term ""suit"" also depends on the context of its user which in turn, amongst other things, depends on the

Act or the rule in which it is used. No doubt the proceeding before a National Commission is ordinarily a summary proceeding and in an appropriate

case where the Commission feels that the issues raised by the parties are too contentions to be decided in a summary proceeding it may refer the

parties to a civil court... A proceeding before the National Commission, in our considered view, comes within the term ""suit.

j. Therefore, as can be seen from the Supreme Court ruling, the term ""suit"" is not to be strictly construed but construed in the manner in which it is

used. The term ""suit"" has been used in the Board resolution in the context of 'initiation of proceedings' and has to be liberally construed. That apart, the

above mentioned Supreme Court decision, and particularly the admission of the counsel for the Respondent that this Appellate Board is a Court,

clearly establishes that the proceedings before this Appellate Board would also be in the nature of a suit and as such it is clear that Mr. Mehra is

competent to sign the present revocation applications.

k. As regards the derivative action, the circumstances in which the same were filed have no bearing on the present proceedings. The mere filing of a

derivative action cannot and does not act as estoppel of Mr. Yogesh Mehra from filing these revocation applications. The argument of the counsel for

the Respondent in this regard is therefore completely irrelevant and not germane to the issue as to whether Mr. Mehra has the authority to sign the

present proceedings.

l. It was next contended that Enercon GmbH has filed an application before the Company Law Board, New Delhi praying for a stay of the operation

of the Board resolution dated 26.4.2007. The said application was filed on 5.10. 2010. The said application came up for admission on 19.10. 2010

wherein a stay of the operation of the resolution was sought. The Company Law Board has however not granted any interim order. Therefore, as on

date, the Board resolution is valid and subsisting. It has not been set aside or stayed by any court / judicial body. Under these circumstances, it cannot

be said that Mr. Mehra has no locus or authority to sign the revocation applications on the strength of the resolution dated 26.4.2007. As such it cannot

also be held that the applicant company is not a person within the meaning of Sections 2(1)(s) or 64 of the Act.

m. Lastly, reliance by the Respondent on the interim orders passed by the CLB dated 29.10.2007 and 19.5.2008 is completely misconceived and

misconstrued for the sole reason that these orders have been passed after the resolution dated 26.4.2007 and cannot in any manner have any

relevance on the issue as to whether Mr. Mehra has the authority to sign the revocation applications in the present case, particularly when this Board

resolution has not been made null and void.

7. Basics and objects of the invention to understand the background and nomenclature in respect of the patent titled, ""Azimuth driver for wind energy

plants"" are:-Here in this case there are few words, such as pitch angle, yaw angle or yaw error and Azimuth position, the meaning of which should be

clearly understood first and with this view, certain technical information about these phrases have been slightly elucidated here for reference. Wind

turbines are designed to produce electrical energy. They are designed so that they yield maximum power output at wind speeds around 15 mps. (30

knots). In case of stronger winds it is necessary to waste part of the excess wind energy in order to avoid damage to the wind turbine. All wind

turbines therefore come with some sort of power control. There are two different

ways of doing this safely on modern wind turbines.

8. The power available from a wind turbine increases very rapidly with wind speed: a doubling of wind speed results in as much as an eight-fold

increase in power. Therefore it is important to locate the wind generators in a place where the wind speed is high, as well as reasonably constant.

9. The Wind Turbine Yaw Mechanism:

a. Wind turbine yaw mechanism is used to turn the wind turbine rotor against the wind.

b. Hub

The hub serves as a base for the rotor blades and extenders, as well as a means of housing the control systems for the pitch drive. It rotates freely

and attaches to the nacelle using a shaft and bearing assembly.

Wind Turbine and Nacelle Cut-Out c. Nacelle

c. Nacelle

The nacelle houses the gearbox, generator, control electronics and portions of the yaw mechanism. The nacelle also houses the control electronics that

sense wind speed and direction, rotor speed and generator load to adjust the generator's physical and electrical operating parameters for optimal

performance. If the wind direction shifts, the control electronics will command the yaw motor to slew the turbine into the wind. As wind speed

changes, the control electronics adjust rotor speed and blade pitch to maximize power capture. If the wind gusts threaten to over-power the system,

the control electronics adjust the same physical parameters to depower the turbine and prevent damage to the rotor and generator. Finally, the control

electronics also provide information to the array operator at a large wind farm for array-wide operational adjustments.

d. Yawing

Modern large wind turbines are typically actively controlled to face the wind direction measured by a wind vane situated on the back of the nacelle.

By minimizing the yaw angle (the misalignment between wind and turbine pointing direction), the power output is maximized and non-symmetrical

loads minimized. However, since the wind direction varies quickly the turbine will not strictly follow the direction and will have a small yaw angle on

average. The power output losses can simply be approximated to fall with cost

(yaw angle).

e. Yaw Error.

The wind turbine is said to have a yaw error, if the rotor is not perpendicular to the wind. A yaw error implies that a lower share of the energy in the

wind will be running through the rotor area. If this is the only thing to happen, then yaw control would be an excellent way of controlling the power

input to the wind turbine rotor. That part of the rotor which is closer to the wind direction will be subject to a larger wind force than the rest of the

rotor. On the one hand, this means that the rotor will have a tendency to yaw against the wind automatically, regardless of the fact whether an upwind

or a downwind turbine is being dealing with. On the other hand, it means that the blades will be bending back and forth in a flap wise direction for

each turn of the rotor.

f. Yaw Mechanism: Rotates the turbine directly into the wind in order to generate maximum power. Typically, yaw sensors monitor the wind direction

and activate the yaw motors to face the prevailing wind. A wind vane measures wind direction and relays data to the yaw mechanism.

g. Active yaw systems The various components of the modern active yaw systems vary depending on the design characteristics but all the active yaw

systems include a means of relatable connection between nacelle and tower (yaw bearing), a means of active variation of the rotor orientation (i.e.

yaw drive), a means of restricting the rotation of the nacelle (yaw brake) and a control system which processes the signals from wind direction

sensors (e.g. wind vanes) and gives the proper commands to the actuating mechanisms.

h. The most common types of active yaw systems are:

â?¢ Electric yaw drive -Brake: The nacelle is mounted on a roller bearing and the azimuth rotation is achieved via a plurality of powerful electric

drives. A hydraulic or electric brake fixes the position of the nacelle when the re-orientation is completed in order.

i. Coming to the important technical terms and the nomenclature used therein has to be understood first.

a. The 'front' of the blade is the surface that faces towards the wind; it's flat and angled a bit. Therefore the side of the rotor blade which faces the

direction of the wind is called the 'pressure side'.

b. The 'back' of the blade is facing away from the wind and that is the other side of the rotor blade, which is rounded in shape. This side is called as

the 'suction side' or the 'lower pressure side'.

c. The 'Leading Edge' is the edge of the blade that faces or leads in the direction of rotation.

d. The 'trailing edge' is the edge of the blade that is opposite to the leading edge, i.e. the edge which trails behind.

e. The 'Pitch' of the blade is the angle between the surface of the front of the blade, and the plane of the blade's rotation. It changes over the length of

the blade.

f. The Chord of the blade is the width (the distance between the leading edge and the trailing edge) and it gets less (the blade gets narrower) as the

diameter gets larger.

10 A drawback of the wind power is that the wind can be erratic, changing direction by the hour. The gondola or the power house is rotated above the

azimuth bearing, thereby ensuring an optimum position of the rotor blades in the wind. The wind vane determines the direction of wind.

11 Azimuth-the length of the are of the horizon (in degrees) intercepted between a given point and a reference direction, usually north, and measured

clockwise from the reference direction. Azimuth may be synonymous with bearing, a navigational term that can have different meanings. Any point in

space can be located relative to an observing point by its azimuth angle, elevation angle, and range.

12 In an azimuth indicating apparatus, there are provided a wind speed measuring unit for measuring a wind speed, an azimuth measuring unit for

measuring azimuth, a display unit for displaying wind speeds measured at respective azimuths, and a display control unit for controlling the display unit

to display the wind speeds measured at the respective azimuths based on the measurement results of the azimuth measuring unit and the wind speed

measuring unit. Accordingly, the blowing direction of the wind is indicated by the azimuth indicating apparatus.

13 With this background of knowledge, let us look at the arguments of the applicant and that of the Respondent.

14 Arguments by applicants

The counsel for the Applicant started his argument inviting our attention to the

definition of the ""patent"" as under Section 2(1)(m), ""invention"" as under

Section 2(1)(j), ""inventive step"" as under Section 2(1)(ja), respectively of the Act. The counsel submitted that how the applicant satisfies the condition

of ""person interested"" and what is the definition of ""person interested"" as given in Section 2(1)(t) of the Act. Then the counsel submitted that inventive

step being the first ground, its definition and analysis with respect to the claims, particularly the scope of definition of the claims, from which the

feature regarding the technical advance or economic significance or both and that makes the invention not obvious to a person skilled in the Article

Then the counsel submitted as follows:

A. Claims of the patent lack inventive step:

a. At the outset it was submitted that the Respondent submitted an expert affidavit of Mr. Ulf Scheumann of Germany on 12-10-2010.

b. The counsel pointed out that the Respondent has not moved any amendment in the claim in the present case.

c. The patent should be revoked as being not involving an inventive step and the omnibus claim does not clearly define the scope of the invention.

d. The question as to whether the invention as claimed, is obvious has to be judged from the view point of the person skilled in the Article

e. Analysis of the inventive step is done in two steps normally; first, identify from the claims, the feature which shows the technical advance or the

economic significance or both. When this first step is done, then only assess whether the features claimed in the claims are obvious to the person

skilled in the Article So in step 1, if none of the features could be identified, then proceeding to the step 2 will be futile and the invention would be

certainly lacking inventive step, or in other words, the invention would be obvious to the person skilled in the Article

f. Attention was invited to the revocation application, to show that the impugned invention is titled 'Azimuth driver for wind energy plants' and then to

the claim 1 on page 26 of the revocation application.

g. Claim 1 at page 26 was:

A wind power installation housing comprising:

(a) a rotor, the rotor having at least one rotor blade; (b) a displacement device for displacing the housing to orient the rotor in a desired wind direction,

the displacement device comprising a three phase asynchronous motor adapted to receive:

(i) a three-phase variable frequency current for displacing the housing; and

(ii) a direct current for braking displacement of the housing.

h. The counsel submitted that a wind power installation with a housing comprising a rotor, the said rotor having at least one rotor blade is very well

known and also admitted by the Respondent in the opening paragraph of the description. In this connection attention was drawn to Para 4(1) (d) of the

counter statement at page 9 wherein the Respondent has averred that these features are self-evident (""being conventional parts of known wind energy

installations"").

i. The counsel submitted that every known wind installation at the priority date has a displacement device for displacing the housing to orient the rotor

in the desired wind direction. This is also admitted by the Respondent as may be seen from page 18 of the revocation application, which is particularly

in original page 3 lines 3 to 6 of the patent specification. In particular the said passage was highlighted while quoting here below: ""In previously known

wind power installations, motor-powered wind direction tracking of the machine housing, the azimuthal displacement system, takes over the function of

automatically orienting the rotor and the machine housing according to the wind direction"" (emphasis supplied). Thus, a wind power installation with a

housing having a rotor, with at least one rotor blade and a displacement device for orienting the housing in the wind direction is very well known in the

prior Article

j. Further, the counsel also pointed out from page 17 last paragraph of the revocation application -""The way in which wind direction tracking is

implemented in known wind power installations is described in ""windkraftanlagen"" (wind power installations), Erich Hau, second edition, 1995, page

268 ff and 316 ff respectively""- that it is an admitted fact by the Respondent that the wind tracking by displacing the housing by a motor is very well

known and therefore there is no technical advancement made by the Respondent in that respect.

k. The counsel submitted that the extract from page 19 of the revocation application i.e. ""Figure 7 is a part sectional view of a known wind direction

tracking system with an electrical setting drive from Westinghouse WTG-0600"" also supports the view that a wind power installation with a housing

having a rotor, said rotor having at least one rotor blade, a displacement device for orienting the housing in the wind direction, the displacement device

being a motor driven by a three phase AC are all known in the prior Article

l. In further support of the contention, the counsel also referred to Annexure 2 at page 36 which is the European patent 0 266 715 (here in after

referred to as EP '715). This application was published on 11.5.88 (vide INID code 43 at page 36) and hence was prior to the impugned patent. The

counsel referred to page 38 lines 4 to 8 which read as follows: ""A tower 10 supports a horizontal turntable assembly 12 about 70 feet above the

ground. Mounted on the turntable assembly 12 is a carriage 14 relatable in the yaw direction about the vertical axis of the turntable assembly. The

carriage 14 carries a drive shaft housing 16 in which a high torque hollow drive shaft is journalled. A twin blade rotor 18 is connected to the forward

end of the drive shaft.....

m. Thereafter the counsel referred to page 40 lines 24 to 29 to show that the yaw drive (displacement device) was a reversible induction motor. It

was submitted that it is well known to the person skilled in the art that an induction motor is an asynchronous motor. This has also been admitted by

the Respondent at page 12 of the counter-statement where it is stated - ""Even though it is not contested that an induction motor may be conceived as

an asynchronous motor, and that there may have been many solutions in the prior art ....".

n. Thus, the prior art EP '715 patent clearly discloses all the elements of the Claim 1 of the impugned patent excepting that the motor is fed a direct

current for braking the displacement of the housing. This fact has been admitted by the Respondent in the counter-statement at para 4(k)(i) at pages

11 and 12.

o. The counsel then referred to the paragraph beginning with line 19 at page 18 showing that in the known wind power installations there is a rotary-

movement check or yaw brake to prevent the yaw movement (housing movement) after the tracking operation has been effected. It was also pointed

out that the object of the invention was, inter-alia, to eliminate the mechanical brake and replace it with other type of braking.

p. That object is achieved by feeding direct current to the stator winding of the motor after the three-phase current is switched off. In other words, the

mechanical brake is replaced by an electrical brake. In this connection the following paragraph from page 20 was highlighted: ""After the displacement

operation by means of the three-phase current the motors are switched off and thus no longer produce any torque. In order now also to provide for a

braking action on the part of the drive motor and in order still to maintain an adequate braking torque during the stoppage time when load peaks occur,

the three-phase asynchronous motor is acted upon by a direct current immediately after separation from the three-phase network. That direct current

generates a stationary magnetic field in the asynchronous motor which is thereby immediately decelerated. As far as possible the direct current supply

is maintained during the entire stoppage time."" The counsel, therefore, submitted that the replacement of the mechanical brake in a known wind power

installation with electrical braking was the contribution in Claim 1 of the impugned patent.

q. The attention was invited at this point to Annexure 3 at page 48 of the revocation application, which is a US patent 4 514 677 (here in after

referred to as US '677 patent) granted on 30th April 1985 which is more than 14 years before the priority date of the impugned patent. From page 49

it was shown that an induction motor 10 (asynchronous motor) being fed with a variable frequency AC 18 in three-phase mode (12,14 and 16) was

something very well known for a long time.

r. The attention was invited to Lines 14 to 19 at Column 1 at page 50, which is extracted below:

Various types of braking of A.C. induction motors are well known including mechanical friction braking, electrical braking using direct current injection

into a stator winding of the motor, capacitive self-excitation and magnetic braking by short-circuiting the motor stator winding."" (Emphasis supplied). It

was pointed out that even though the object of the '677 patent was to provide a two-stage electrical braking, the above extract was only to show that

electrical braking by DC injection was a very well known method to the person skilled in the Article

s. The attention was also invited to the non - patent literature, which is a book on ""Alternating Current Machines"" by M.G. Say, Fourth Edition. The

first edition was in 1936 and the fourth edition was in 1976, which is 19 years before the priority date of the impugned patent. It was shown from page

319 that feeding an induction motor (asynchronous motor) with a variable frequency three-phase AC was very well known.

t. The attention was thereafter also invited to page 327 of the said book, where DC injection braking was disclosed. The extract was as shown below:

D.C. Injection Braking In this method the stator windings, immediately after their disconnection from the 3 phase supply, are excited with direct

current from a rectifier.....". It was pointed out that DC braking after disconnection from the 3-phase AC was something very well known to the

person skilled in the art for a long time and is part of the common general knowledge

u. The attention was thereafter also invited to page 329 where it has been stated ""Injection braking takes little power from the supply and gives smooth

braking torque, useful for mine winders and high-inertia loads"". It was submitted that a wind power installation is a high-inertial load, due to its high

mass. Hence it was submitted that there was nothing inventive in applying the very well known concept of DC braking in wind displacement motors.

The concept is applicable to all asynchronous motors and hence its application to such motors that perform the displacement of the housing in a wind

power installation was not at all inventive and the invention is obvious to the person skilled in the Article

v. The above book has been referred to by the applicant's expert Mr. R.S. Barve in his affidavit, at pages 13 and 14 of the Reply to the counter-

statement.

w. The attention was thereafter invited to the counter-statement at page 13, in particular to the following extract: "" Moreover, the mere fact that the

US patent 4,514,677 refers to ""well known types of braking""(including electrical braking using direct current injection) does not add anything new. The

physical effect that applying a DC current to a AC asynchronous motor has a braking effect has been known in engineering art since some years, this

is nothing but common general knowledge"". It is thus an admitted fact by the Respondent that DC braking of asynchronous motors is nothing new.

The mere fact that the asynchronous motor is used in a wind power installation and DC braking is used by the Respondent in such motors cannot

impart any technical advance over the existing knowledge.

x. Thus, Claim 1 is merely using the known common general knowledge of DC injection to produce a braking effect in an asynchronous motor in a

known wind power installation with a housing having a rotor, which has at least one rotor blade, a displacement device having a motor which is

adapted to receive a three phase variable frequency AC for displacing the housing and DC for braking displacement of housing.

y. In the counter statement the Respondent admitted that wind tracking is known and so also was the three-phase motor driven by variable frequency

AC. He also admitted, that it is not the Patentee who had developed DC Injunction braking, but pointed out that all wind power installation use only

mechanical braking till then and it is the Patentee who was first to apply DC injunction braking to wind power installation.

z. In rejoinder it was pointed out that the reply supports the case of the applicant that the wind power installation with relatable housing, the rotation

being carried out by asynchronous motor fed by three phase AC current was very well known and mere application of known concept of DC

injunction braking to such motor was not at all an invention. In fact there is no disclosure anywhere in the patent specification about the contribution, if

any, by the Patentee in the adaptation of an asynchronous motor for DC injunction nor any regarding difficulty in applying DC braking to a motor in

wind power installation. It was pointed out with reference to page 50 that the very objective of braking by DC injunction into a motor was to rapidly

stop the motion of the motor when AC power supply is cut off, whereas the same objective is found in the impugned patent.

aa. The counsel pointed out that para 16-95 and 16-109 of Narayanan Book on Patent law, referred to by the Respondent counsel, was not relevant as

the Patentee has not shown any technical advance by him over the existing knowledge of DC injunction braking.

bb. In particular, attention was invited to para 14 of the counter statement wherein, Respondent has stated that ""invention has applied principles which

commonly had been regarded as being not suitable for wind power installations to this new field of application. He made several experiments, he set

up detailed calculations - and he came to result that one should try to use DC currents for wind power installation's asynchronous motors"". It was

pointed out by the applicant that this averment was without any support or evidence either in the patent specification or in the pleadings. The Patent

specification nowhere states that the common principle of DC injunction braking was not suitable for motors in wind power installation. There is no

whisper anywhere regarding any experiment or detailed calculation being done by the Patentee. In fact Claim 1 is simply an application of the very

well known concept of DC braking to a very well known asynchronous motor. It is in fact a misnomer to say that the application is in wind power

installations. It continues to be an application in an asynchronous motor, as is well known in the prior art, and the fact that the motor is used in a wind

power installation has no relevant to the determination of the inventive step.

B. INVENTIVE STEP/OBVIOUSNESS

a. The counsel submitted that invention and inventive step are two distinct terms and it is not necessary that contours of the two terms should be co-

terminus. Further, Section 2(1) (ja), which defines ""inventive step"", gives a clear indication that the inventive step is a feature of the invention. In other

words invention and inventive steps may be different. While invention is identified by the claim as a whole, the inventive step, involves identifying that

feature in the claim (invention) which involves technical advance as compared to existing knowledge or which shows economic significance.

b. Attention was invited to the decision of the Court of Appeal of United Kingdom in 1985 RPC 55 Wind Surfing International Inc. v. Tabur Marine

Great Britain Limited. It was pointed out that the question of obviousness involves analysis of the following four steps, viz.,

i. Identify the inventive step in the patent in question or, if it cannot be done, construe it.

ii. Imputing to a normal skilled but unimaginative addressee what was common general knowledge in the art at the priority date.

iii. Identifying difference, if any, between the matter cited and the alleged invention and iv. Decide whether this difference constitutes a step which

would have been obvious to a skilled man, found without any knowledge of the alleged invention.

c. The above approach to obviousness was also restated by the High Court of Justice, Chancery Division, Patent Courts in 2007 EWHC 2636 (Pat)

between Mr. Aloys Wobben and Vestas Celtic Wind Technology Ltd.,

d. Para 141 of this decision which is relevant is extracted here below.

e. The correct approach to the issue of obviousness has recently been restated by the Court of Appeal in Pozzoli v. BDMO SA 2007 EWCA 588:

i. (a) Identify the notional ""person skilled in the art

(b) Identify the relevant common general knowledge of that person;

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

iii. 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

claim as construed;

iv. Ask whether, viewed without any knowledge of the alleged invention as claimed, those differences constitute steps which would have been obvious

to the person skilled in the art or do they require any degree of invention?

f. Counsel submitted that applying above steps to the present case, following conclusion can be reached.

1. The inventive step embodied in claim 1 of the patent is use of DC injunction in the motor for braking the displacement of the housing.

ii. The common general knowledge at the priority date of the patent is as follows.

1 Wind power installation with a housing, having rotor that has at least one rotor blade, a displacement device for displacing the housing in a desired

wind direction, the said displacement device comprising an asynchronous motor fed by three-phase variable frequency AC for displacing the housing is

known and admitted.

2 The concept of injecting direct current into the stator of an asynchronous motor was also well known.

iii. There is no difference between the matter cited in claim 1 and the common general knowledge on the priority date. Even if it is assumed that the

starting point is the closest prior art, it would mean a known wind power installation with an asynchronous motor for displacement, being fed by a

variable frequency three phase current and mechanical braking. The difference between the said known wind power installation and Claim 1 is DC

injunction braking.

iv. There is no difference between Claim 1 and common general knowledge which implies that there is no inventive step, since there is no technical

advancement over the existing knowledge.

g. Assuming, without admitting, that the difference is DC injunction braking that would have been the obvious choice for the person skilled in the art

since that concept is very well known to any electrical engineer and no specific improvement therein has been claimed or disclosed in the

specification.

h. In view of the above it was submitted that claim 1 was liable to be revoked under Section 64 (1) (f).

C. Arguments based on Technical experts affidavits

a. The affidavit of the Respondent expert does not in any manner bring out that the application of DC injunction in an asynchronous motor of wind

power installation nor has brought out technical advancement. In fact it says that it is a simple and effective brake system that avoids the

disadvantages of mechanical braking of prior Article

b. Para 7.1 of the affidavit accepts that EP '715 patent does not deal with DC injunction braking. This is admitted position by the applicant also. In

para 7.2, in response to US 677 patent it has only been stated that this document does not give any hint as to how to overcome the problem of

displacing housing of wind power installation. The fallacy in that submission is that DC injunction braking is effected in an asynchronous motor, the

said motor being used to displace the housing in a wind power installation. The purpose of citing the ""677 patent was only to show that DC injunction

braking of induction motors was very well known. The affidavit does not state anywhere that there was any problem in applying the known concept of

DC injunction braking to motor used in a wind power installation.

c. Therefore, it was submitted that there is no inventive step in claim 1.

D. DEPENDENT CLAIMS

The dependent claims 2, 3 and 4 have same inventive concept running through them. The additional limitation in these claims of frequency converter

or there are plurality of three phase asynchronous motors or a current transformer being used do not impart any inventive step to these claims. In view

of the above it was submitted that all the claims of '885 patent are liable to the revoked.

15. Finally the applicant's counsel ended his arguments by making the prayer

that the said impugned patent be revoked in its entirety.

16. The counsel for the Respondent started his arguments first referring to the infringement suit C.S. (OS) No. 1349/2009 before the High Court of

Delhi, and also to the M.P No. 82/2010 filed on 25th February 2010 where the Respondent had challenged Mr. Yogesh Mehra's competency to

depose an affidavit and has no locus standi to initiate revocation application on behalf of Enercon (India) Limited. The counsel submitted that the

matter was heard and decided by this Board that this matter would be disposed of along with the other matters of the main application. When they

appealed against this order, the Hon'ble Madras High Court had also directed the Appellate Board to hear and consider this issue in the miscellaneous

petition along with the main application and dispose of the matter. Hence the request was made to decide the locus standi issue along with other

grounds of the revocation application.

17. Without prejudice to the above issue, the counsel submitted as followed:

a. At the very outset, the Respondent submitted that the applicant's contentions are based on conjectures and surmises and are misleading in nature

and denied in to Further the applicant based on some prior art to erroneously conclude that the subject invention is obvious and does not involve an

inventive step and also the claims in the specification do not sufficiently define the invention. In this connection the Respondents counsel cited the fact

that in many countries the patent has been granted for the subject invention and also questioned that if it is not a real invention, how a patent would

have been granted in so many countries.

The present patent is directed to

i. Wind power installation housing (feature 'a')

ii. Rotor having at least one rotor blade (feature 'b')

iii. Displacement device for displacing the housing to orient the rotor in the desired wind direction (feature 'c')

iv. Displacement device comprises a three phase asynchronous motor (feature 'd')

v. The asynchronous motor is adapted to receive a three phase variable frequency current for displacing the housing (feature 'e')

vi. Three phase asynchronous motor is adapted to receive a direct current for braking displacement of the housing (feature 'f').

vii. The Respondent filed the counter statement and referred to the inventive step of the claims 1 to 5 of the impugned patent against the cited patents

US '677 and EP '715 patent. It was further submitted that the invention claimed in the claims 1 to 5 of the impugned patent is based on the idea of

using the adaptation of the asynchronous motor being made to receive a three phase variable frequency current for displacing the housing to orient the

rotor in a desired wind direction and to receive a direct current for braking displacement of the housing.

So the invention does not become obvious to a person skilled in the Article

b. The instant revocation application has been made by the applicant with a view to confuse the Appellate Board, as defence against the infringement

activities, without however, adopting a fair course of action, as available under Section 105 of the Act, shows that the fact that they are infringing the

patent and continue to do the same, amongst others, owned by the Respondent herein.

c. The Respondent pointed out that the applicant has not relied on the grounds of the novelty of the subject patent and so it is admitted that the subject

patent does not lack novelty thereof.

Inventive step

1 It was submitted by the Respondent that the invention claimed in the claims 1 to 5 of the impugned patent relates to an azimuthal drive for wind

power installations. Such wind power installations generally have an active drive for wind direction tracking. The rotor blades of the rotor should be

always oriented in the direction of the wind in order to minimize power losses due to deviations from the wind direction (so called yaw angle). Hence

the wind direction tracking system is located in the transition between machine housing and pylon top. To understand the functionality of these

systems, in particular, two different components of the azimuthal drives must be distinguished; so called setting drives on the one hand, and the so

called yaw brakes on the other side. Such yaw brakes are required in order to prevent the yaw movement about the axis of rotation having to be held

after the tracking operation has been effected by the drive motors(e.g. page 2, lines 19 onwards) since otherwise the service life of the drive

assemblies or the upstream connected transmission assemblies could scarcely be guaranteed. The technical starting point of the impugned invention is

to solve the technical problems which occur when building powerful and adequate brakes. In particular, during operation of a wind power installation

with turbulent winds, very high forces occur and high and frequent load peaks in the azimuthal drive (which is very often the case in larger

installations) the situation additionally involves a very high degree of asymmetry in the individual drives. The entire load and the entire torque must be

simultaneously distributed -if possible uniformly - to individual drives. In the event of severe turbulence, the turbulences may excite the azimuthal drive

in such a way that the motors oscillate relative to each other.

2 Therefore the object of the invention is to improve the azimuthal drive for wind power installations, in particular,

a. To provide a structurally simple azimuthal drive;

b. To ensure uniform load distribution for each azimuthal drive and c. To prevent unwanted torque fluctuations in the individual drives.

3. The Respondent submitted that, whereas features at 'a' and 'b' of the claim 1 are self evident (being ""conventional"" parts of known wind energy

installations; housing, rotor, blade), only the following features are explained in details, as under:

i. Feature 'c' defines a displacement device, functionality of which has been explained earlier.

ii. Feature 'd' describes a specific type of engine: in order to displace the rotor a three phase asynchronous motor is used. Such engines are specific

types of AC current motor where the power is supplied to the rotating device by means of electromagnetic induction.

4. The Respondent counsel submitted that to understand the technical features of such asynchronous motors, what is to be considered is that such

asynchronous motors do not have any direct supply of current into the rotor; instead, a secondary current is electro-magnetically induced in the rotor.

To achieve this, stator windings are arranged around the rotor so that - when energised with an Ac power supply - they create a rotating magnetic

field pattern which sweeps past the rotor. This changing magnetic field pattern induces a current in the rotor conductors, which interacts with the

rotating magnetic field created by the stator windings. By means of this effect, a rotational motion of the motor is caused.

5. The counsel submitted that feature 'e' defines what could be named as

""normal"" mode of operation of asynchronous motors; a three phase variable

frequency current is supplied to the motor (precisely to the stator winding of the motor) which in turn displaces the housing.

6. Finally feature 'f' defines a further property of the azimuthal drive: braking the displacement is not performed by mechanical brakes; instead the

asynchronous motor itself is used; feature 'f' prescribes that a direct current for braking displacement of the housing is used.

7. The counsel submitted that it has been explained in the impugned patent in the fig. 3, as to what happens if a direct current is applied to the

synchronous motor, which shows that the torque / rotary speed characteristic curve of an asynchronous motor in the direct current (DC) mode of

operation.

8. The Respondent counsel submitted that two different properties of the said ""characteristic curve"" are relevant for the technical effect as used by

the impugned patent; if the motor has stopped, i.e. if it is not turning at all (n=0), then the asynchronous motor does not generate any torque and this is

an ideal situation which should be reached after any movement of the rotor. However with increasing rotary speed, the synchronous motor (if supplied

with DC current) generates a certain torque, which rises linearly with the amount of speed; and furthermore this torque is directed contrary to the

direction of the turning movement. This leads to the braking effect. If the rotor turns clockwise, the torque of the asynchronous motor exerts a counter

clockwise force, and if the rotor turns counter clockwise, the torque of the asynchronous motor exerts a clockwise force, thus resulting in a braking

effect.

9. Therefore the Respondent counsel submitted that the allegations and the arguments based on the paragraphs 20 to 22 of the revocation application

relying on the EP '715 patent and the US '677 patent are prima facie not sustainable, for the reasons enumerated in earlier paragraphs.

Reply to Respondent's arguments

a. The counsel submitted that the Respondent was giving the interpretations to b. Finally the applicant's counsel ended his arguments with the prayer

that as the claim 1 by borrowing limitations and language which are neither part of the claim nor of the specification.

b. Finally the impugned patent does not have any inventive step, the same may

be revoked.

18. We have heard the arguments of both the counsel and have gone through the pleadings and the documents filed in support thereof.

19. Person interested

In this case, the Respondent has raised a question of locus standi for the person who has filed the application for revocation for and on behalf of the

Petitioners that he is not authorized and is not ""the person interested"" to file a revocation petition. The Respondent has taken the ground that in terms

of the articles of association of the company, Mr. Yogesh Mehra, the Managing Director lacks the competence to file a revocation application for and

on behalf of the applicants for revoking the patent granted to the Respondent, as the reliance placed on the articles of association is wrong and the

power is not conferred on him to execute any such legal action, and more so when the matter is still pending before the company law board. The

applicant had stated that Mr. Yogesh Mehra, being the Managing Director has been authorized by the Board resolution dated 26th April 2007 to

defend and initiate suits and proceedings on behalf the applicant and that in terms of the articles of association of the company, Mr. Yogesh Mehra,

being the Managing Director has the requisite locus standi to file and institute the revocation proceedings. The Appellate Board has the power to

check as to whether the applicant filing the revocation, namely the applicant company, herein M/s. Enercon (India) limited is a ""person interested"" or

not, according to the Act under which this proceeding has been initiated.

20. Now we wish to point out that this issue of locus standi of Mr. Mehra has already been discussed and decided earlier in Para 6(g) ante. The

Company Law Board having not granted any interim order after 29.10.2007 and 19.5.2008, as on date, the Board resolution is valid and subsisting. It

has not been set aside or stayed by any court / judicial body. Under these circumstances, it cannot be said that Mr. Mehra has no locus or authority to

sign the revocation applications on the strength of the resolution dated 26.4.2007. As such it cannot also be held that the applicant company is not a

person within the meaning of Sections 2(1)(s) or 64 of the Act.

21. We have to see whether the applicant is a person interested or not to file a revocation application. According to Section 2(1)(t) of the Act, ""person

interested"" is defined as below:

Person interested"" includes a person engaged in, or in promoting, research in the same field as that to which the invention relates;

22. The word or expression ""person interested"" appears under Sections 25 as well as 64 of the Act, dealing with opposition proceedings to the grant of

patent before the Controller and revocation proceedings before this Appellate Board. In fact the actions taking place in opposition proceeding is almost

analogous and similar to the revocation proceedings before this Appellate Board, excepting for the creation or constitution of an opposition Board

under Section 25(3) (b) of the Act, to examine and submit the recommendation to the Controller who is to hear the opposition parties. As per Patent

Law by P. Narayanan, it could be clearly seen or stated that there are three grounds upon which the opponent can establish his locus Standi to oppose

the grant of patent or to seek the revocation of the patent, which are mainly,

(1) possession of patents in the same field as the invention relates;

(2) manufacturing interest relating to a similar product being manufactured by the patentee; and

(3) trading interest.

23. In AIR 1983 DELHI 496 Ajay Industrial Corporation v. Shiro Kanao of Ibaraki city, para B in page 496, it was held that, ""person interested"" must

be a person who has a direct, present and tangible commercial interest which was injured or affected by the continuance of the patent on the register.

The applicant's counsel stated at the very beginning, that they are the one of the foremost leaders in the wind energy sectors in India and they

manufacture and install wind turbines all over India and thus they are an interested person within the meaning of the Section 2(1)(t) as well as the

Section 64 of the Act. In view of this judgment, we have to check and find out whether this applicant is a person interested as per the requirement of

the Act under which these proceedings are taking place.

24. It was further held in the above cited case that ""the person interested within the meaning of Section 64 must be a person who has a direct, present

and tangible commercial interest or public interest which is injured or affected by the continuance of the patent on the register.

25. In Globe Industries Corporation's Patent (1977) R.P.C 563 in the Supreme Court of Judicature - Court of Appeal, Lord Justice Scarman observed

that, ""where the statute uses the words 'any person interested', the interest has

to be genuine; the possibility of prejudice has to be genuine and in

addition, and quite independently, the Court must be satisfied that the opposition or the application for revocation, as the case may be, is not a frivolous,

vexatious or blackmailing operation.

26. And in the same case law, Globe Industries Corporation's Patent (1977) R.P.C 563 in the Supreme Court of Judicature - Court of Appeal, Lord

Justice Goff observed that, ""what an opponent on an application for revocation has got to establish is that there is genuine interest which may be

prejudiced; Of course, the prospect of prejudice must be real, not speculative or fanciful and it must be a prejudice to present a commercial interest.

27. In Mediline A.G's Patent (1973) R.P.C 91 before the patents Appeal Tribunal, Mr. Justice Graham has held that, ""there must be a real, definite

and substantial interest to prove the commercial interest and that it must be a genuine interest. There must be the existence, or the likelihood of real

prejudice.

28. Therefore applying the same analogy here, we find that, as regards first ground, there is no evidence before us to show that the applicants are in

possession of any patents in the same field. As regards the second ground i.e., the manufacturing interest, the applicants are one of the foremost

leaders in the wind energy sectors in India and they manufacture and install wind turbines all over India and this establishes the manufacturing interest.

As regards the trading interest, looking at the ruling of the Solicitor General, Sir Thomas Inskip in Clavel's application 45 R.P.C 222 and a previous

ruling by Sir Stanley Buckmaster in New Thing's application, 31 R.P.C 40 that ""a trading interest to be effective, must be a real, definite and

substantial interest and must not arise from something that the opponent proposes to do"".

29. It is very clear that the applicants have been manufacturing and installing the wind turbines shows the trading interest of the product, too, as ""a

person interested"" in opposing the grant or revocation of the patent. Therefore what an applicant for revocation of patent, (the applicants herein) has

to establish is that there is a real and genuine interest together with a commercial interest, which may be prejudiced when such a patent is granted.

The applicants have shown that they have been manufacturing and installing wind turbines all over India and this shows that they have a real and

genuine interest together with a commercial interest in the product. In view of the above said findings, we find that undoubtedly locus Standi is

established by the applicants and they are ""the person interested"" in this case sufficiently meeting the requirement of Section 2(1)(t) of the Act.

30. Common general knowledge

Now we shall see as to whether a common knowledge on the date of the patentee's claim would amount to anticipation by way of public knowledge

destroying the novelty or affecting the inventive step. First we should see what is a common general knowledge?

31. ""Criteria for ""Common General Knowledge

It is important to have a clear understanding of the meaning of the common general knowledge. It is the background technical knowledge available to

all in a particular trade while doing or carrying out a product development activity.

32. The common general knowledge as described by Laddie J in Raychem Corp's Patents [1998] RPC 31 at 40, ""The common general knowledge is

the technical background of the notional man in the art against which the prior art must be considered ... It includes all that material in the field he is

working in which he knows exists, which he would refer to as a matter of course if he cannot remember it and which he understands is generally

regarded as sufficiently reliable to use as a foundation for further work or to help understand the pleaded prior Article This does not mean that

everything on the shelf which is capable of being referred to without difficulty is common general knowledge nor does it mean that every word in a

common text book is either. In the case of standard textbooks, it is likely that all or most of the main text will be common general knowledge.

33. The law as to what constitutes common general knowledge is also set out in the decisions of the Court of Appeal in General Tire & Rubber Co v.

Firestone Tyre & Rubber Co Ltd 1972 RPC 457 at 482-483 and Beloit Technologies Inc v. Valmet Paper Machinery Inc 1997 RPC 489 at 494-495;

34. In General Tire v. Firestone 1972 RPC 457 at 482: it is held, 'on the other hand, common general knowledge is a different concept [sc. from public

knowledge] derived from a commonsense approach to the practical question of what would in fact be known to an appropriately skilled addressee -

the sort of man, good at his job, that could be found in real life.'

35. In Beloit v. Valmet 1997 RPC 489 (CA)). Aldous J held; ""At the same time, the skilled man should not be taken to represent some sort of lowest

common denominator of persons actually engaged in the field, possessed only of the knowledge and prejudices that all of them can be said to possess.

The common knowledge of different groups employed on the same tasks in different organizations is likely to be different, and It is unlikely that the

expert witnesses will be truly representative of the skilled person, as not only may they be too well qualified but they will come to the case with

personal prejudices or preferences that must be discounted:

36. Luxmoore J. in British Acoustic Films (53 R.P.C.221) stated: ""It is not sufficient to prove common general knowledge that a particular disclosure

is made in an article, or series of articles, in a scientific journal, no matter how wide the circulation of that journal may be, in the absence of any

evidence that the disclosure relates. A piece of particular knowledge as disclosed in a scientific paper does not become common general knowledge

merely because it is widely read, and still less because it is widely circulated. Such a piece of knowledge only becomes general knowledge when it is

generally known and accepted without question by the bulk of those who are engaged in the particular art; in other words, when it becomes part of

their common stock of knowledge relating to the Article

37. The correct explanation was given by the Court of Appeal in Beloit Technologies Inc v. Valmet Paper Machinery Inc (1997) RPC 489 at pages

494-495:-""The information in a patent specification is addressed to such a man and must contain sufficient details for him to understand and apply the

invention. It only lacks an inventive step if it is obvious to such a man. It follows that evidence that a fact is known or even well-known to a witness

does not establish that fact forms part of the common general knowledge. Neither does it follow that it will form part of the common general

knowledge if it is recorded in a document.

38. In ICI Chemicals & Polymers Ltd., v. Lubrizol Corps 45 IPR 577 Emmett J stated, ""the common general knowledge is the technical background to

the hypothetical skilled worker in the relevant art....but also includes the material in the field in which he is working which he knows exists and to

which he would refer as a matter of course.

39. Thus from the above cases, common general knowledge is the common

knowledge in the field to which the invention relates. It is generally known

as common knowledge and regarded as a good basis for further research activity by those engaged in that art before it becomes part of their common

stock of knowledge relating to the art, and then becoming part of the common general knowledge. Therefore it means the information which at the

date of the patent in question is known and accepted without question by those who are engaged in the art or science to which the alleged invention

relates. It would also appear therefore, that when it is a question of common general knowledge i.e, knowledge available in a country for a long time,

which every skilled worker in that field is, expected to know. Then such knowledge would be sufficient to invalidate a patent. Again such knowledge

need not even be found in a particular document. In other words a patent application has to be accessed on the basis of not only what will be available

from prior documents but also from the common general knowledge on the subject, which may or may not be available in any such document. It can

be taken as a well settled principle, that the common general knowledge is a knowledge that must be attributed to a skilled person, without which he

may not be taken to be a skilled person in the Article Therefore it is a knowledge that every skilled person should acquire before he embarks on the

problem for which the patent provides the solution. A patent can therefore be taken to be addressed to the skilled addressee, someone skilled in the

subject matter of the invention. It is also important to differentiate between matter which was in the public domain at the priority date of the patent and

matter which can properly be regarded as common general knowledge. Evidence that a particular fact is known or even well-known to a witness does

not mean that it is common general knowledge. Likewise, a piece of information disclosed in a scientific paper does not become common general

knowledge merely because it is widely read. On the other hand, it is not necessary to show that the information is known in the sense that the skilled

person has memorized it. Material which is known to exist and to which the skilled person would refer as a matter of course if he cannot remember it

is clearly part of the common general knowledge.

40. Skilled person in the art

A patent specification is addressed to those likely to have a practical interest in the subject matter of the invention, and such persons are those with

practical knowledge and experience of the kind of work in which the invention is intended to be used. The addressee reads the specification with the

common general knowledge of persons skilled in the relevant Article He is unimaginative and has no inventive capacity. So a patent must be

considered through the eyes of the notional person skilled in the Article The 'notional skilled person' who is the addressee of the specification is

normally described in various ways for various purposes. The skilled person is essentially a legal construct, and not a mere lowest common order of all

the persons engaged in the art at a particular time.

41. The Patentee shall disclose all the features of the invention in the specification, without any ambiguity, in return to the exclusive monopoly right

which is granted to him. A patent can be granted only when all the three following criteria are satisfied or complied with. They are,

a. New and useful

b. Inventive step or non-obviousness

c. Capable of industrial application

42. The first criterion is the novelty of the product, which is to be patented. Novelty is not defined in the Indian law, but the 'invention' and ""inventive

step"" are defined as below under Section 2(1)(j) and 2(1) (ja) of the Act respectively;

(j) ""invention means a new product or process involving an inventive step and capable of industrial application;

(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;

43. The applicants have argued by referring to the European Patent 266715 and US patent 4,514,677 in respect of obviousness and lack of inventive

step and we consider only those arguments made before us relying on the specific grounds taken by them.

44. The best-known statement of status and function of claims in a patent specification, is given by Lord Russell of Killowen in Electric and Musical

Industries Ltd v. Lissen Ltd (1938) 56 RPC 23, 39: ""The function of the claims is to define clearly and with precision the monopoly claimed, so that

others may know the exact boundary of the area within which they will be

trespassers. Their primary object is to limit and not to extend the monopoly.

What is not claimed is disclaimed. The claims must undoubtedly be read as part of the entire document and not as a separate document; but the

forbidden field must be found in the language of the claims and not elsewhere.

45. Obviousness

We shall see the claims of the impugned patent with respect to obviousness or lack of inventive step. A patent will be invalid for lack of inventive step

if the invention claimed in it was obvious to a person skilled in the art having regard to the state of the art at the priority date. In fact at the date of the

patent, the EP '715 patent and the US '677 patent are already known to the public knowledge and the person skilled in the art must be aware of the

said patents as the former patent forms part of the common general knowledge, being an old prior art of more than 11 years by then, and the later

patent also being an old prior art of more than 14 years, forming part of the common general knowledge in the relevant field.

46. The test to ascertain whether an invention involves an inventive step is expressed in Halsbury Laws of England (3rd Ed., vol.29, p. 42) as: 'was it

for practical purposes obvious to the 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 should or would make the invention the subject of the claim concerned.' In other words, the question to be

answered in determining inventive step is 'Would a non-inventive mind have thought of the alleged invention?' If the answer is 'no', then the invention

is non-obvious. If the patent claimed merely includes the development of some existing trade, in the sense that it is a development as would suggest

itself to an ordinary person skilled in the art, it would fail the test of non-obviousness.

47. Let us analyze claim 1 first as regards its inventive features.

1. The main inventive features as claimed in claim1 are as below:

The present patent is directed to

i. Wind power installation housing (feature 'a')

ii. Rotor having at least one rotor blade (feature 'b')

iii. Displacement device for displacing the housing to orient the rotor in the desired wind direction (feature 'c')

iv. Displacement device comprises a three phase asynchronous motor (feature 'd')

v. The asynchronous motor is adapted to receive a three phase variable frequency current for displacing the housing (feature 'e')

vi. Three phase asynchronous motor is adapted to receive a direct current for braking displacement of the housing (feature 'f').

2. During the argument it was submitted that every known wind installation at the priority date has a displacement device for displacing the housing to

orient the rotor in the desired wind direction. This is also admitted by the Respondent as may be seen from page 18 of the revocation application,

which is particularly in internal page 3 lines 3 to 6 of the patent specification. In particular the said passage was highlighted while quoting here below:

In previously known wind power installations, motor-powered wind direction tracking of the machine housing, the azimuthal displacement system,

takes over the function of automatically orienting the rotor and the machine housing according to the wind direction"" (emphasis supplied). Therefore, a

wind power installation with a housing having a rotor, with at least one rotor blade and a displacement device for orienting the housing in the wind

direction is very well known in the prior Article

3. Further, the counsel also pointed out from page 17 last paragraph of the revocation application -""The way in which wind direction tracking is

implemented in known wind power installations is described in ""windkraftanlagen"" (wind power installations), Erich Hau, second edition, 1995, page

268 ff and 316 ff respectively""- that it is an admitted fact by the Respondent that the wind tracking by displacing the housing by a motor is very well

known and therefore there is no technical advancement made by the Respondent in that respect.

4. Our attention was drawn to page 19 of the revocation application i.e. ""Figure 7 is a part sectional view of a known wind direction tracking system

with an electrical setting drive from Westinghouse WTG-0600"" also supports the view that a wind power installation with a housing having a rotor, said

rotor having at least one rotor blade, a displacement device for orienting the housing in the wind direction, the displacement device being a motor

driven by a three phase AC are all known in the prior Article Therefore it is seen that there is no technical advancement made by the Respondent in

respect of this feature.

5. The Respondent has averred in para 4(1) (d) of the counter statement at page 9 and also in the original pages 3 & 4 of the patent specification that

these features (a) and (b) at (i) & (ii) in the para 1 above are self-evident (""being conventional parts of known wind energy installations""). Therefore

these features at (i) to (iv) above are very well known features in the prior art as admitted by the Respondent. In page 12 first paragraph of the

counter statement, the Respondent has committed that ""induction motor may be conceived as an asynchronous motor, and there have been many

solutions in the prior art disclosing wind turbines which are mounted relatable in order to follow the wind direction"". Further the Respondent has stated

in the same paragraph, that there is nothing new about this particular feature. Hence these features would then be found to form part of the state of

the art and so there is no inventive step here, as these features are all very well known in the prior Article It is pointed out by the applicant that the EP

'715 patent in page 5 lines 24 to 28 of the specification shows that yaw drive in a wind power installation makes use of the induction motor as the

motor to drive and move the displacement device for displacing the housing to orient the rotor in the desired wind direction and according to the

Respondent as committed by him in his counter statement, the induction motor may be conceived as an asynchronous motor.

6. Therefore it is clearly well known in the art, that when induction motor used in the said EP '715 may be conceived as the asynchronous motor, the

person skilled in the art would be aware of the features mentioned in para (i) to (iv) of the impugned patent. Then as pointed out by the applicant, the

US '677 patent clearly states that the electrical braking system has the induction motor which is adapted to receive a three phase variable frequency

current as seen in the drawing accompanying the said US patent specification. Further in Col.1 lines 8 to 17 of the said US '677 patent, it is stated that

the electrical braking uses DC injection (power source) into the stator winding for braking displacement of the housing in accordance with the wind

direction. The above extract in the said US patent clearly shows that electrical braking by DC injection was a very well known method to the person

skilled in the Article Therefore it would be possible to a skilled person in the art, with average knowledge of skills to easily combine the teachings of

US '677 patent and the EP '715 patent to visualize the details of the invention and find to arrive at this invention point.

7. Further applicant's counsel drew our attention to the non - patent literature, which is a book on ""Alternating Current Machines"" by M.G. Say, Fourth

Edition. The first edition was in 1936 and the fourth edition was in 1976, which is 19 years before the priority date of the impugned patent. It was

shown from page 319 that feeding an induction motor (asynchronous motor) with a variable frequency three-phase AC was very well known.

8. The attention was thereafter also invited to page 327 of the said book, where DC injection braking was disclosed. The extract was as shown below:

D.C. Injection Braking In this method the stator windings, immediately after their disconnection from the 3 phase supply, are excited with direct

current from a rectifier....."". It was pointed out that DC braking after disconnection from the 3-phase AC was something very well known to the

person skilled in the art for a long time and is part of the common general knowledge

9. The attention was thereafter also invited to page 329 where it has been stated ""Injection braking takes little power from the supply and gives smooth

braking torque, useful for mine winders and high-inertia loads"". It was submitted that a wind power installation is a high-inertia load, due to its high

mass. Hence it is now clear that there was nothing inventive in applying the very well known concept of DC braking in wind displacement motors.

The concept is applicable to all asynchronous motors and hence its application to such motors that perform the displacement of the housing in a wind

power installation was not at all inventive and the invention is obvious to the person skilled in the Article

10. Therefore a skilled person in the art, would easily combine the teachings of the EP '715 patent and the US '677 patent and also the teachings

available from the said text book on ""Alternating Current Machines"" by M.G. Say, Fourth Edition to arrive at this invention point. We could now find

that the invention claimed in claim 1 does not show any technical advance over the existing knowledge in the said prior arts seen above. Hence the

claim 1 as worded does not involve any inventive step. We find that the invention is found to be obvious to any skilled person in the art with average

knowledge of skills. In view of this there is no inventive step in the invention claimed in the impugned patent and the invention claimed is obvious.

11. The attention was thereafter invited to the statement made by the Respondent in the counter-statement at page 13, in particular to the following

extract: "" Moreover, the mere fact that the US patent 4,514,677 refers to ""well known types of braking""(including electrical braking using direct

current injection) does not add anything new. The physical effect that applying a DC current to a AC asynchronous motor has a braking effect has

been known in engineering art since some years, this is nothing but common general knowledge"". It is thus an admitted fact by the Respondent that

DC braking of asynchronous motors is nothing new. The mere fact that the asynchronous motor is used in a wind power installation and DC braking is

used by the Respondent first time in such motors cannot impart any technical advance over the existing knowledge.

12. In fact there is no disclosure anywhere in the patent specification about the contribution, if any, by the Respondent in the adaptation of an

asynchronous motor for DC injunction nor any regarding difficulty in applying DC braking to a motor in wind power installation. It was pointed out

with reference to page 50 that the very objective of braking by DC injunction into a motor was to rapidly stop the motion of the motor when AC

power supply is cut off, whereas the object of the impugned patent is found to be same.

13. The Respondent's counsel referred to para 16-95 and 16-109 of Narayanan Book on Patent law, but it was found to be not relevant as the

Respondent who is the Patentee has not shown any technical advance by him over the existing knowledge of DC injunction braking.

14. Particularly, attention was invited to para 14 of the counter statement wherein, Respondent has stated that ""invention has applied principles which

commonly had been regarded as being not suitable for wind power installations to this new field of application. He made several experiments, he set

up detailed calculations - and he came to result that one should try to use DC currents for wind power installation's asynchronous motors"". It was

pointed out by the applicant that this averment was without any support or evidence either in the patent specification or in the pleadings. We also find

that in the Patent specification nowhere it is stated that the common principle of DC injunction braking was not suitable for motors in wind power

installation. Also there is no whisper anywhere regarding any experiment or detailed calculation being done by the Patentee. In fact Claim 1 is simply

an application of the very well known concept of DC braking to a very well known asynchronous motor. Yes it is correct, that in fact, it is a misnomer

to say that the application is in wind power installations, whereas it is appreciably noticed that the whole concept continues to be an application in an

asynchronous motor, as is well known in the prior art, and the fact that the motor is used in a wind power installation does not qualify for the

determination of the inventive step.

48. The contention of the Respondent is not correct, that, as the applicant argued, the grant of a patent in US or EPO is not relevant to the

proceedings here and further they have considered the EP '715 patent and the US '437 patent or not is again irrelevant, because the test for

obviousness or inventive step is quite different with respect to US and EPO from India, viz., the provision as defined in Section 2(1)(ja) of the Act,

which requires, "" technical advance over the existing knowledge"" before considering the fact as to whether the invention is obvious to the person

skilled in the Article Moreover the grant of patent in other countries does not give any assurance or a presumption as to the validity of grant of patent

or even investigation during revocation proceedings which is covered in Section 13(4) of the Act which lays down that there is no presumption as to

the validity to the grant of a patent.

49. As per the Act, all the claims in a complete specification will have one inventive step or making them to be having group of inventive features to

have a single inventive concept. Since that inventive step in claim 1 has been shown to be obvious, all the subsidiary claims dependent on the principal

claim 1, which tend to add only minor variations of features will not impart any inventive step to the dependent claims.

50. We shall now consider a few case laws as regards obviousness or inventive step and particular reference is made to M/s. Bishwanath Prasad

Radhey Shyam v. Hindustan Metal Industries, (1979) 2 SCC 511, where it was held that, ""was it for practical purposes obvious to a skilled worker, in

the field concerned, in the state of the 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?

51. Buckley LJ in Valensi v. British Radio Corporation 1973 RPC 337, held that, "" The hypothetical addressee is not a person of exceptional skill and

knowledge, and he is not to be expected to exercise any invention nor any prolonged research, enquiry or experiment. He must, however, be prepared

to display a reasonable degree of skill and common knowledge of the art in making trials and to correct obvious errors in the specification if a means

of correcting them can readily be found and arrive at the result...

52. A patent will be invalid for lack of inventive step if the invention claimed in it was obvious to a person skilled in the art having regard to the state of

the art at the priority date. Our attention was invited to the decision of the Court of Appeal of United Kingdom in 1985 RPC 55 Wind Surfing

International Inc. v. Tabur Marine Great Britain Limited, where it was pointed out that the question of obviousness involves analysis of the following

four steps, and a detailed and correct approach to the issue of obviousness has recently been restated by the Court of Appeal in Pozzoli v. BDMO SA

2007 EWCA 588 : 2007 FSR 37. It was also pointed out that the above approach to obviousness was also restated by the High Court of Justice,

Chancery Division, Patent Courts in 2007 EWHC 2636 (Pat) between Mr. Aloys Wobben and Vestas Celtic Wind Technology Ltd., where it was

pointed out that the question of obviousness involves analysis of the following four steps:

53. The following four steps are:

1 Identify the notional 'person skilled in the art' and the relevant common general knowledge of that person

2 Identify the inventive concept of the claim in question or, if it cannot be done, construe it.

3 Identify if any the differences existing between the matters cited as forming state of the art and the inventive concept of the claim or the claim as

construed.

4 Ask whether, when 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 invention?

54. The first step is; ""who is the notional person skilled in the art in this field of wind power installation technology?

1 This is a person who is likely to have a practical interest in the subject matter of the invention. The relevant common general knowledge of that

person must be such as the knowledge of electrical engineering with a broad specialisation or requisite experience in the wind power technology. In

this case, both the applicant and the Respondent are the person skilled in the art or otherwise such person must have the knowledge of induction

motors or asynchronous motors and its azimuthal control systems having displacement drive braking systems applicable in wind power installations.

2. Relevant common general knowledge known to the person skilled in the art and also admitted to be the common general knowledge:

a. Known wind power installations for a wind direction tracking, have motor-powered machine housing, with an azimuthal displacement system, to

take over the function of automatically orienting the rotor and the machine housing according to the wind direction. (Therefore, a wind power

installation with a housing having a rotor, with at least one rotor blade and a displacement device for orienting the housing in the wind direction is very

well known in the prior Article)

b. Wind direction tracking implemented in known wind power installations is described in ""windkraftanlagen"" (wind power installations), Erich Hau,

second edition, 1995, page 268 ff and 316 ff respectively""- (it is an admitted fact by the Respondent that the wind tracking by displacing the housing by

a motor is very well known).

c. A known wind direction tracking system with an electrical setting drive from Westinghouse WTG-0600"" also supports the view that a wind power

installation with a housing having a rotor, said rotor having at least one rotor blade, a displacement device for orienting the housing in the wind

direction, wherein the displacement device is a motor driven by a three phase AC. (these features are all known in the prior Article)

d. The Respondent has averred in the counter statement [para 4(1) (d) at page 9] and as well as in the internal pages 3 & 4 of the patent specification

that the above said features are self-evident. (""being conventional parts of known wind energy installations"")

e. EP '715 patent in its page 5 lines 24 to 28 of the specification shows that yaw drive in a wind power installation makes use of the induction motor as

the motor to drive and move the displacement device for displacing the housing to orient the rotor in the desired wind direction and (the Respondent

has admitted in his counter statement) the induction motor may be conceived as

an asynchronous motor.

f. It is clearly well known in the art, that when induction motor used in the said EP '715 may be conceived as the asynchronous motor. (person skilled

in the art would be aware of this feature) g. US '677 patent clearly states that the electrical braking system has the induction motor which is adapted

to receive a three phase variable frequency current as seen in the drawing accompanying the said US patent specification. Further in Col.1 lines 8 to

17 of the said US '677 patent, it is stated that the electrical braking uses DC injection (power source) into the stator winding for braking displacement

of the housing in accordance with the wind direction. The above extract in the said US patent clearly shows that electrical braking by DC injection

was a very well known method.

h. Further in the non - patent literature, which is a book on ""Alternating Current Machines"" by M.G. Say, Fourth Edition on page 319 that feeding an

induction motor (asynchronous motor) with a variable frequency three-phase AC was very well known. On page 327 of the said book, DC injection

braking was disclosed. (The extract was as shown below):

i. ""D.C. Injection Braking In this method the stator windings, immediately after their disconnection from the 3-phase supply, are excited with direct

current from a rectifier.....". DC braking after disconnection from the 3-phase AC was something very well known to the person skilled in the art for

a long time and is part of the common general knowledge"".

j. On page 329 it has been stated ""Injection braking takes little power from the supply and gives smooth braking torque, useful for mine winders and

high-inertia loads"". Further a wind power installation is a high-inertia load, due to its high mass.

k. A statement is made by the Respondent in the counter-statement at page 13, in particular as follows: ""Moreover, the mere fact that the US patent

4,514,677 refers to ""well known types of braking""(including electrical braking using direct current injection) does not add anything new. The physical

effect that applying a DC current to a AC asynchronous motor has a braking effect has been known in engineering art since some years, this is

nothing but common general knowledge.

55. The second step is; ""Identify the inventive concept of the claim in question"" The main inventive features as claimed in claim1 are:

Displacement device for displacing the housing to orient the rotor in the desired wind direction comprises a three phase asynchronous motor, which is

adapted to receive a three phase variable frequency current for displacing the housing, wherein said three phase asynchronous motor is adapted to

receive a direct current for braking displacement of the housing.

56. The third step is; ""Identify if any the differences existing between the matters cited as forming state of the art and the inventive concept of the

claim or the claim as construed"".

a. Inventive concept of the claim

Three phase asynchronous motor is adapted to receive a direct current for braking displacement of the housing.

b. ""Now to identify if any the differences existing between the matters cited as forming the state of the art and the inventive concept of the claim or

the claim as construed"":

1 US patent 4,514,677 refers to ""well known types of braking"" including electrical braking using direct current injection. Therefore neither ""differences

exist between the matters cited as forming the state of the art and the inventive concept of the claim or the claim as construed"" nor could they be

identified.

2 Non - patent literature, which is a book on ""Alternating Current Machines"" by M.G. Say, Fourth Edition. The first edition was in 1936 and the fourth

edition was in 1976, which is 19 years before the priority date of the impugned patent. It was shown from page 319 that feeding an induction motor

(asynchronous motor) with a variable frequency three-phase AC was very well known. Reference was invited to page 327 of the said book, where

DC injection braking was disclosed. The extract was as shown below:

D.C. Injection Braking

In this method the stator windings, immediately after their disconnection from the 3-phase supply, are excited with direct current from a rectifier....."".

It was pointed out that DC braking after disconnection from the 3-phase AC was something very well known to the person skilled in the art for a long

time and is part of the common general knowledge"". Thus on or before the priority date of the invention claimed in the impugned patent, there does not

exist any difference between the prior art cited and the features claimed in the

impugned patent.

57. The last step is: ""ask whether, when 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 invention?

a. For the lack of inventive step in the invention claimed when it is obvious to a person skilled in the art having regard to the state of the art at the

priority date of the patent application, that patent will become invalid.

b. In the instant case, at the date of the patent, the EP '715 patent and the US '677 patent are already known to the public knowledge and the person

skilled in the art is aware of the same and any skilled person in the art, though he is unaware of this patent, but with his average knowledge of skills in

the field of electrical technology and their application in the field of wind power installation technology, will certainly be able to visualize the details of

the invention or in other words, with his average and normal skill will be able to arrive at this invention, because of the fact that it is normal technical

knowledge, that in the field of wind power machines, to deploy electrical braking systems to the motor driven displacement drive units in the wind

power installations, as shown in the impugned patent. Further the skilled person in the art is aware of the non-patent literature, and has access to refer

the following technical books, such as, given below:

i. Alternating Current Machines"" by M.G. Say, Fourth Edition. The first edition was in 1936 and the fourth edition was in 1976, which is 19 years

before the priority date of the impugned patent.

ii. ""windkraftanlagen"" (wind power installations), Erich Hau, second edition, 1995, page 268 ff and 316 ff respectively.

c. From the above, the skilled person comes to know that the features claimed in claim 1, are clearly present in the US '677 patent and therefore the

claim 1 does not involve an inventive step in view of the US '677 patent taken alone or coupled with the above referred non-patent literatures, which

are open to public access and reference freely from any public library, then, there is no technical advance in the claimed invention compared to the

existing knowledge available in the US '677 patent and said non-patent literature. Therefore on or before the priority date of the invention claimed in

this patent, a skilled person in the art would have easily known or must be aware

of the latest developments in the relevant field. Hence the claim 1 as

worded does not involve any inventive step. We also find that the invention is found to be obvious in view of the above said prior art cited.

d. When the basic technology has already reached a particular, probably, a saturated level or point, for any optimization, in wind tracking in wind

power plants, then in any research made in that field should have or show any technical advance to that level of knowledge available then. In the

absence of any such technical advance or contribution by the patentee, over the work done already, or compared to the knowledge present and

available in the state of art, then that piece of work done or shown does not deserve the right of any monopoly.

e. In view of this analysis and the finding herein, it is very clear there is no inventive step in the invention claimed in the impugned patent and the

invention claimed is obvious to any skilled person in the Article

58. Therefore combining the said two cited EP and US patents, and the above said non patent literature, a person skilled in the art can arrive at the

invention claimed in the claim 1 of the impugned patent. Hence the invention cannot be said to have any inventive step and the invention is obvious.

59. Conclusions

1. Obviousness

a. Comparing the inventive features in the US '677 patent and the technological details available from the above referred non-patent literature, with

that of the inventive features as construed from the principal claim 1 of the impugned patent, no difference in the invention claimed in the claim of the

impugned patent could be perceived or noticed.

b. Invention claimed would be obvious to a person skilled in the art having regard to the state of the art, when no technical advance over the prior art,

is established, by the patentee, then the patent lacks inventive step and will become invalid.

c. In the instant case, at the date of the patent, the US '677 patent and the EP '715 patent are already known to the public knowledge and any one has

the access to above referred non-patent literature. Then the person skilled in the art is aware of these technological details and any skilled person in

the art, though he is unaware of this patent, but with his average knowledge and skills in the field of relevant technology will certainly be able to

visualize the details of the invention and will be able to arrive at this invention, as this a known technical knowledge, or otherwise a common general

knowledge by then, that in the field of wind power machines the wind tracking is done by using the azimuthal drive units, which houses the motor to

drive the displacement device in accordance with the wind direction and then stop the further movement of the displacement device using the then

technological electrical braking systems, which is much more efficient compared to the available mechanical braking systems.

d. In view of this analysis and the finding herein, it is very clear there is no inventive step in the invention claimed in the impugned patent and the

invention claimed is obvious to any skilled person in the Article

2. As per the Act, all the claims in a complete specification will have one inventive step or making them to be having group of inventive features but to

have a single inventive concept. Since that inventive step in claim 1 has been shown to be obvious, then all the subsidiary claims dependent on the

principal claim 1, which tend to add only minor variations of features will not impart any inventive step to the dependent claims.

3. Therefore the subordinate claims which are dependent on the principal claim1 would also become invalid as they cannot stand as a separate

independent or individual claim as no exclusive technical improvement in the feature could be shown therein.

4. Therefore combining the said two cited US patents, a person skilled in the art can arrive at the invention claimed in the claim 1 of the impugned

patent. Hence the invention cannot be said to have any inventive step and the invention is obvious.

5. Hence after taking into consideration of the above said case laws and findings andanalysis made herein above, together with foregoing statements

in the conclusions, we hereby allow the application for the revocation of the patent. Consequently the patent granted to the Respondent is revoked and

also direct the Controller of Patents to remove the patent No. 202885 from the register of patents. M.P. No. 82/2010 stands disposed of in terms of

the observations made earlier in this order as per the directions of the Hon'ble High Court of Madras. The parties shall bear their own costs.

