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IN THE HIGH COURT OF JUDICATURE AT MADRAS

DATED: 08.03.2024

CORAM :JUSTICE N.SESHASAYEE

(T)CMA(PT) No.172 of 2023
(SR.No.4/2020/PT/CHN)

NIHON ONKYO ENGINEERING CO. LTD.,
(Formerly known as NITTOBO ACOUSTIC
ENGINEERING CO. LTD.,)
(Through its constituted Power of Attorney Holder
Mr.Tanmay Joshi)
1-21-10, Midori, Sumida-ku
Tokyo 130-0021
Japan. ... Appellant

Vs.

1.The Controller General of Patents,
Designs & Trade Marks
Patent Office, Intellectual Property Building
G.S.T. Road, Guindy, Chennai - 600 032.

2.The Deputy Controller of Patents and Designs
Patent Office, Intellectual Property Building
G.S.T. Road, Guindy, Chennai - 600 032. ... Respondents

PRAYER: Transferred Civil Miscellaneous Appeal (Patent) filed under Section 117-A of the Patents Act, 1970, praying (a) to call for the records of the patent application No.7501/CHENP/2010 relating to the impugned order and issue an order setting aside / quashing the impugned order dated August 27, 2019 and direct respondent No.2 to grant a patent on the patent application No.7501/CHENP/2010, allowing the present appeal; (b) that the

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appellant be allowed to amend, add or alter any ground of appeal and also be permitted to place on record relevant material including evidence in the form of an affidavit, written submissions and synopsis of the case law; (c) and to pass such other appropriate relief, order and/or direction which this Court may deem fit and proper in the circumstances of the case.

For Appellant : Mr.D.Subbin, Mr.Vineet Rohilla
& Mr.Rohit Rangi
for M/s.Remfry & Sagar

For Respondent : Mr.J.Madhanagopal Rao
Senior Panel Counsel

JUDGMENT

This appeal is directed against the rejection of appellant's application for patenting its invention titled '*Reflector Structure Sound Field Adjusting Method, Columnar Reflector Structure, Room, Program, and various Acoustic Room Designing System*', under Section 3(k) and 59 of the Act. Besides, the Controller has also expressed a view that the title of the invention is far too long and does not reflect the substance of the invention. The appellant's invention relates to a reflector structure, a sound field adjusting method, a columnar reflector structure, a room, a program, and a various acoustic room designing system, and more particularly to a reflector structure, a sound field adjusting method, a columnar reflector structure, a room, a

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program, and a various acoustic room designing system for a wide frequency range.

2.The learned counsel for the appellant submitted that the invention of the appellant enables an ideal acoustic system and this is achieved with certain microprocessor/controller which the appellant has developed for determining the dimension of the room where the acoustic system is required to be provided and it also prepares an acoustic design for a room and will also suggest where the sound reflector and sound absorbant must be positioned.

3.In its application, the appellant had made 23 claims of which 2 are independent claims and the rest are dependent claims. This was followed by the respondent coming out with his FER, wherein he had cited 4 prior arts namely D1 to D4. The resistance then was under Section 2(1)(ja) and 3(k) of the Act. The appellant responded to the FER, and amended its claims and brought down the total number of claims from 23 to mere 3. Of the 3 claims now made, one is an independent claim and the other two are dependent claims.

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4.The Controller would now issue his hearing notice, in which, he retained all the four prior arts. However, he gave up its initial objection under Section 2(1) (ja), but retained its objection under Section 3(k). He also would now allege that the amended claims exceeds the original specification and it is hit by Section 59 of the Act. This is now under challenge.

5. Heard both sides. The learned counsel for the appellant made the following submissions :

(a) In his 11 paged order, the Controller has allowed two short paragraphs spread over the last two pages of the order to explain how the appellant's application is hit by Sec.59 and Sec.3(k) of the Act. In arriving at this conclusion, the Controller had not considered the written submissions filed by the appellant.

(b) So far as objection under Sec.59 is concerned, each of the amended claims fall well within the original specifications. A four paged comparative tabulation is provided wherein it is explained how they are essentially culled out from the written submissions.

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SUPPORT FOR THE AMENDMENTS

Features of pending claims 1-3	**Support from the originally filed specification.**
Claim 1: A various acoustic room designing system (X)	**Supported by originally filed claim 23 -** A various acoustic room designing system comprising the computer that executes the program according to claim 22.
calculating diameters of a plurality of columnar reflectors to diffuse sound waves of respective different frequency ranges; and calculating an arrangement condition for the columnar reflectors having the calculated diameters in order to have a plurality of reflecting surfaces, which make random reflection directions, reflection time delays, and/or phases of reflected sound for the sound waves of different frequency ranges, comprising:	**Supported by originally filed claim 1 -** calculating diameters of a plurality of columnar reflectors to diffuse sound waves of respective different frequency ranges; and calculating an arrangement condition for the columnar reflectors having the calculated diameters in order to have a plurality of reflecting surfaces, which make random reflection directions, reflection time delays, and/or phases of reflected sound for the sound waves of different frequency ranges.
input unit (110) that inputs data and parameters for performing a sound field adjustment	**Paragraph [0017] of the specification -** The input unit **110** inputs data and parameters for performing a sound field adjustment according to the embodiment of the present invention from the 3D scanner **200** and the input device **300**
a memory unit (120) that stores the parameters input by the input unit (110)	**Paragraph [0024] of the specification -** The input parameters are stored by the input unit **110** into the memory unit **120**.
a diameter calculation unit (130) that calculates the diameters of the	**Paragraph [0025] of the specification -** The diameter calculation unit **130** calculates

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columnar reflectors as claimed in the parameters stored in the memory unit (120),	the diameters of the columnar reflectors according to the input parameters. If predetermined diameters are selected, the diameter calculation unit **130** calculates the target frequencies.
an arrangement condition calculation unit (140) that calculates the arrangement condition of the columnar reflectors as claimed in the parameters stored in the memory unit (120) and the diameters of the columnar reflectors calculated by the diameter calculation unit (130)	**Paragraph [0039] of the specification -** The arrangement condition calculation unit **140** calculates the arrangement condition of the columnar reflectors according to the input parameters and the foregoing diameters.
a simulation processing unit that performs acoustic room arrangement and simulation processing according to a data on the acoustic rooms, including the diameters of the columnar reflectors calculated by the diameter calculation unit (130) and the arrangement condition of the columnar reflectors calculated by the arrangement condition calculation unit (140)	**Paragraph [0057] of the specification -** various acoustic room arrangement and simulation processing is performed according to the data on the acoustic rooms, including the calculations of the diameters and arrangement condition of the columnar reflectors.
an output unit (160) that output processing result obtained by the simulation processing unit	**Paragraph [0057] of the specification** - graphs can be output by the output unit **160** to the display unit **400** or the printer**500**.
wherein the diameter calculation unit (130) calculates the diameters of the columnar reflectors such that the diameters of the columnar reflectors for a high range target frequency of 1000 Hz or above to be 30 to 75 mm, the diameters of the columnar reflectors for a mid-low range target frequency of 630 Hz or above to be 60 to 120 mm, and the diameters of	**Paragraph [0036] of the specification -** a diameter of 30 to 75 mm is thus calculated if a high range target frequency of 1000 Hz or above is given. Also, as given a mid-low range target frequency of approximately 630 Hz or above, the calculation of the diameter is 60 to 120 mm, for example. Further, for a low-range target frequency of approximately 500 Hz and above, the

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the columnar reflectors for a low-range target frequency of 500 Hz and above to be 80 to 160 mm.	calculation of the diameter is 80 to 160 mm
the arrangement condition calculation unit (140) calculates the arrangement condition of the columnar reflectors such that columnar reflectors of smaller diameters are arranged near a sound source and columnar reflectors of greater diameters are arranged far from the sound source	**Paragraph [0039] of the specification -** the arrangement condition calculation unit **140** calculates the arrangement condition of the columnar reflectors according to the input parameters and the foregoing diameters. The sound field adjusting method according to the embodiment of the present invention is characterized in that (a) columnar reflectors of smaller diameters are arranged in front (on the inner side when seen from the sound source) and columnar reflectors of greater diameters behind, and (b) the columnar reflectors in each row are arranged at random intervals so as to avoid periodicity
Claim 2: the arrangement condition calculation unit (140) calculates the arrangement condition of the columnar reflectors such that the columnar structural members are arranged in any rows, and the columnar reflectors in each row are arranged at random intervals so as to avoid periodicity	**Paragraph [0019] of the specification -** Examples of the arrangement condition setting parameters include how many rows (stages) to configure the columnar structural members in, whether to configure the columnar structural members in any rows, whether there is any sound absorbing layer, and what centimeters from the wall surface are used for the columnar reflector structure. **Paragraph [0039] of the specification** the arrangement condition calculation unit **140** calculates the arrangement condition of the columnar reflectors according to the input parameters and the foregoing diameters. The sound field adjusting method according to the embodiment of the present invention is characterized in that (a) columnar reflectors of smaller diameters are arranged in front (on the inner side when seen from the sound source) and columnar reflectors of greater diameters behind, and (b) the

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	columnar reflectors in each row are arranged at random intervals so as to avoid periodicity
Claim 3: the arrangement condition calculation unit (140) calculates the arrangement condition of the columnar reflectors with following procedure	**Paragraph [0039] of the specification -** the arrangement condition calculation unit **140** calculates the arrangement condition of the columnar reflectors according to the input parameters and the foregoing diameters. **Paragraph [0045] of the specification** (1) Initially, for example, prepare three types of circular columns with different radii. Assume the large, medium, and small radii are a, b, and c, respectively. (2) Then, arrange the circular columns of each size in a row at equal intervals. The interval u between the centers of the large circular columns is such that 2*a<u. For the medium circular columns, the interval v is 2*b<v. For the small circular columns, the interval w is 2*c<w. (3) The rows of large, medium, and small circular columns are arranged in parallel. The distance d between the lines that pass the centers of the large and medium circular columns in rows is such that a+b<d. The distance e between the lines that passes the centers of the medium and small circular columns in rows is b+c<e. (4) Move the position of each circular column in the row direction or the row-to-row direction. Such movement can be achieved, for example, by: generating a uniform random number in the range of ? 0.5 and 0.5; subtracting the radii of circular columns from the center-to-center distance between circular columns (such as u?2*a for large circular columns in the row direction; d?(a+b) for a large circular column and a medium circular column in

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	the row-to-row direction), and multiplying the resultant by the random number; and moving the circular column by the resulting distance
(1) arranging plural types of circular columns with different radii in a row at equal intervals for each type such that an interval between centers of the circular columns in the same row is larger than a diameter of the circular columns.	**Paragraph [0045] of the specification** (1) Initially, for example, prepare three types of circular columns with different radii. Assume the large, medium, and small radii are a, b, and c, respectively. (2) Then, arrange the circular columns of each size in a row at equal intervals. The interval u between the centers of the large circular columns is such that 2*a<u. For the medium circular columns, the interval v is 2*b<v. For the small circular columns, the interval w is 2*c<w.
(2) arranging each row of circular columns in parallel such that a distance between the lines that pass the centers of circular columns in adjacent rows is larger than the sum of radiis of the circular columns in the adjacent rows	**Paragraph [0045] of the specification** (3) The rows of large, medium, and small circular columns are arranged in parallel. The distance d between the lines that pass the centers of the large and medium circular columns in rows is such that a+b<d. The distance e between the lines that passes the centers of the medium and small circular columns in rows is b+c<e.
(3) moving the position of each circular column in the row direction or the row-to-row direction by a distance achieved by: generating a uniform random number in the range of -0.5 and 0.5	**Paragraph [0045] of the specification** (4) Move the position of each circular column in the row direction or the row-to-row direction. Such movement can be achieved, for example, by: generating a uniform random number in the range of ?0.5 and 0.5; subtracting the radii of circular columns from the center-to-center distance between circular columns (such as u?2*a for large circular columns in the row direction; d?(a+b) for a large circular column and a medium circular column in the row-to-row direction), and multiplying the resultant by the random number; and moving the circular column by the resulting

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	distance
subtracting the radii of circular columns from the center-to-center distance between circular columns	**Paragraph [0045] of the specification** (4) Move the position of each circular column in the row direction or the row-to-row direction. Such movement can be achieved, for example, by: generating a uniform random number in the range of ? 0.5 and 0.5; subtracting the radii of circular columns from the center-to-center distance between circular columns (such as u?2*a for large circular columns in the row direction; d?(a+b) for a large circular column and a medium circular column in the row-to-row direction), and multiplying the resultant by the random number; and moving the circular column by the resulting distance
multiplying a result of subtracting by the random number	**Paragraph [0045] of the specification** (4) Move the position of each circular column in the row direction or the row-to-row direction. Such movement can be achieved, for example, by: generating a uniform random number in the range of ? 0.5 and 0.5; subtracting the radii of circular columns from the center-to-center distance between circular columns (such as u?2*a for large circular columns in the row direction; d?(a+b) for a large circular column and a medium circular column in the row-to-row direction), and multiplying the resultant by the random number; and moving the circular column by the resulting distance

(c) So far as the objection under 3(k) is concerned, the appellant has

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developed a microprocessor/controller which has to be made part of any computer system and it is readable by the computer system through a software. This has been explained in the specifications and the claims adequately, but the Controller had short circuited the whole thing without adequate application of mind.

6.1 This Court weighed the submissions of the learned counsel alongside the perusal of the material papers, and is satisfied that the order of the Controller is hardly of any assistance to this Court to understand how he had arrived at the conclusion that it wants this Court to accept. The entire order effectively runs to 11 pages, and he comes out with his conclusion only with two paragraphs, each one runs to about 4 or 5 lines. The learned counsel indeed had circulated the above referred to tabulation to explain how the amended claims are within the scope of original specifications.

6.2 If only the Controller had taken necessary care to go through the written submissions carefully, this state of affairs could have been averted. It is very unfortunate that the Controller is not adequately sensitive to the anxiety of the inventor. Turning to 3(k) of the Act, again this Court finds that the

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appellant's invention is a combination of hardware and the software, and the hardware part is a mere microprocessor and it functions through a software through which the invention can operates. Vis-a-vis objection under 3(k) the Controller appears to be focused on computer system as such, and not about the microprocessor or a tool which the appellant had developed.

7. To sum it up. this Court is not satisfied with the quality of the order of the Controller. Every Controller needs to understand that they are primarily there to support an invention and therefore, when he or she exercises an authority under the statute, they owe an obligation to inform the inventor why and how a certain invention could not be patented. Inasmuch as the Controller's decision is subject to judicial review of this Court in a statutory appeal by the aggrieved inventor, it is all the more necessary that the orders of Controllers are speaking orders.

8. The conclusion is to state the obvious: The appeal is allowed, the impugned order of the Patent Controller dated 27.08.2019 is set aside and the matter is remanded back for *de novo* consideration. To save embarrassment to the Controller who has passed the impugned proceedings, this Court

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directs that appellant's application now be considered by some other Controller. Since the appellant has made his application sometime in 2010, and in the eventuality of its invention is considered for being patented, it will have an effective shelf value of perhaps six years from now. Hence, this Court now requires the Controller incharge of the appellant's invention to dispose of the appellant's application within a period of six months from the date on which he/she takes cognizance of the same. The appellant is at liberty to make amendments to his application, if required. No costs.

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Index : Yes / No
Speaking order/ Non-speaking order
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