

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202411037295 A

(19) INDIA

(22) Date of filing of Application :11/05/2024

(43) Publication Date : 31/05/2024

(54) Title of the invention : AIR COOLER DEVICE

(51) International classification :F04D25/16, F04D29/58, F24F11/74, F24F13/00, F24F13/06, F24F13/10, F24F3/00, F24H3/04

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No :NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :  
**1)Chitkara University**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----  
 -----  
**2)Chitkara Innovation Incubator Foundation**  
**Name of Applicant : NA**  
**Address of Applicant : NA**

(72)Name of Inventor :  
**1)SIHAG, Aryan**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----  
**2)RAHUL**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----  
**3)SHARMA, Neha**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----  
**4)GUPTA, Sheifali**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----  
**5)GUPTA, Rupesh**  
 Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

An air cooler device (100) includes a water tank (102) for storing water and a hollow cylinder (104) having an open end and a plurality of openings disposed on a curved surface of the cylinder (104). Additionally, the device (100) includes an impeller (106) co-axially and rotatably configured within the cylinder (104) and a plurality of cooling pads (108) extending axial between the open end of the cylinder (104) and the water tank (102), along the plurality of openings such that one end of each cooling pad (108) is positioned on the water tank (102). In a cooling mode, the air cooler device (100) actuates the impeller (106) to axially draw air through the open end of the cylinder (104) and radially disperse the drawn air through the plurality of openings while flowing across the plurality cooling pads (108) to supply cool air.

No. of Pages : 14 No. of Claims : 10