



(43) International Publication Date  
31 October 2013 (31.10.2013)

(51) International Patent Classification:  
H02N 6/00 (2006.01)

(21) International Application Number:  
PCT/IN2013/000271

(22) International Filing Date:  
22 April 2013 (22.04.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
1598/CHE/2012 23 April 2012 (23.04.2012) IN

(71) Applicant: EKO TECHNOLOGIES LIMITED [IN/IN];  
#504,Trendset Towers,Road No.2, Banjara Hills, Hydera-  
bad 500034 (IN).

(72) Inventor: N.S., Chandrasekhar; #504,Trendset  
Towers,Road No.2, Banjara Hills, Hyderabad 500034 (IN).

(74) Agent: VIJAY KUMAR, Makyam; I-Win IP Services, A-  
199, 1st Phase, Allwyn Colony, Kukatpally, Hyderabad  
500072 (IN).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,  
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,  
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,  
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,  
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,  
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,

NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,  
RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA,  
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,  
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,  
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,  
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,  
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,  
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

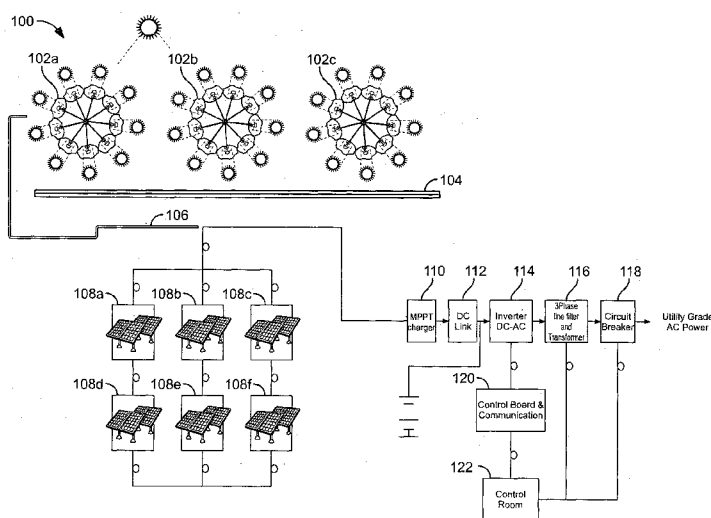
- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- of inventorship (Rule 4.17(iv))

**Published:**

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:  
19 December 2013

(54) Title: SYSTEM AND METHOD FOR CONCENTRATING SOLAR RAYS TO GENERATE SOLAR POWER



(57) Abstract: A system and a method for concentrating solar rays to generate solar power are disclosed. The system includes multiple optical cassegrain lense vertically and horizontally mounted in a stable tubular structure and configured to concentrate solar rays, a mirror positioned below the tubular structure for enabling the plurality of optical lenses to integrate direct sun rays, diffused sun rays and reflected sunrays. The system further includes multiple solar panels vertically stacked in a secured environment to receive the solar rays concentrated by the multiple optical cassegrain lens for generating a solar power, optical fiber cables connected between the plurality of optical compound lens and the plurality of solar panels for routing the concentrated solar rays and a charger connected to the plurality of solar panels for driving the generated solar power.



WO 2013/160912 A3

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IN2013/000271

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
H02N 6/00 (2006.01) i		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
IPC: H02N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
WPI,EPODOC,CNPAT,CNKI,IEEE: SOLAR W POWER, MIRROR, LENS+, OPTICAL W FIBER, PANEL, RAYS, REFLECT+, CONCENTRAT+		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN 201601630 U (XU, Yi) 06 October 2010 (06.10.2010) description, paragraphs [0007]-[0008] and figure 1	1-10
Y	CN 201557063 U (HE, bin et al.) 18 August 2010 (18.08.2010) description, paragraphs [0011]-[0013] and figure 1	1-10
A	CN 102035437 A (ZHANG, Guosheng) 27 April 2011 (27.04.2011) the whole document	1-10
A	JP 2003069069 A (DAIDO STEEL CO., LTD. et al.) 07 March 2003 (07.03.2003) the whole document	1-10
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents:	“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
“A” document defining the general state of the art which is not considered to be of particular relevance	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
“E” earlier application or patent but published on or after the international filing date	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
“L” document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)	“&” document member of the same patent family	
“O” document referring to an oral disclosure, use, exhibition or other means		
“P” document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 08 October 2013 (08.10.2013)	Date of mailing of the international search report <b>31 Oct. 2013 (31.10.2013)</b>	
Name and mailing address of the ISA/CN The State Intellectual Property Office, the P.R.China 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451	Authorized officer  <b>WANG, Jing</b>  Telephone No. (86-10)62413627	

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

PCT/IN2013/000271

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 201601630 U	06.10.2010	None	
CN 201557063 U	18.08.2010	None	
CN 102035437 A	27.04.2011	None	
JP 2003069069 A	07.03.2003	None	