(19) INDIA

(22) Date of filing of Application :23/01/2022 (43) Publication Date: 04/02/2022

(54) Title of the invention: Generalized Approach for DCPWM Based Dual Inverter Fed OEWIM-DTC Drive

:H02P0021300000, H02P0027120000, (51) International H02M0001120000, H02P0023300000, classification

H02M0007538700

(86) International :PCT// Application No :01/01/1900

Filing Date

(87) International : NA Publication No (61) Patent of Addition:NA to Application Number :NA Filing Date

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

Name of Applicant: NA Address of Applicant: NA (72)Name of Inventor: 1)Dr. R. SRINU NAIK

(71)Name of Applicant: 1)Dr. R. SRINU NAIK

2)Mrs M Nalini Devi

Address of Applicant : Faculty, Department of Electrical Engineering, AU College of Engineering (A), Andhra University,

Address of Applicant : Faculty, Department of Electrical

Engineering, AU College of Engineering (A), Andhra University,

Visakhapatnam – 03 -----

Visakhapatnam – 03 ----- ------

2)Mrs M Nalini Devi

Address of Applicant: Research Scholar, Department of Electrical Engineering, Andhra University College of Engineering (A), A.U. Visakhapatnam, Andhra Pradesh-, India. ------ -----

(57) Abstract:

Exemplary aspects of the present disclosure are directed towards a generalized procedure of decoupled pulse width modulation (DCPWM) based on Method called Direct Torque Control (DTC) for Open Ended Winding Induction motor drive (OEWIM) is anticipated in this paper. This drive topology uses two isolated dc sources with equal magnitudes, feeding two standard two level three-phase inverters. To overcome the complexity in classical space vector pulse width modulation (SVPWM) algorithm, a simple generalized approach is presented in this research by using the phase voltages. With this procedure, various PWM algorithms can be generated by varying a constant value. The dual inverters are operating independently with half of the switching frequency. To show the usefulness of proposed PWM fed DTC drive, simulation results analysis has been carried out by using MATLAB and results obtained.

No. of Pages: 16 No. of Claims: 3