पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 22/2022	शुक्रवार	दिनांक: 03/06/2022
ISSUE NO. 22/2022	FRIDAY	DATE: 03/06/2022

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :28/05/2022

(21) Application No.202211030687 A
(43) Publication Date : 03/06/2022

(54) Title of the invention : A METHOD FOR PROPAGATION OF THE SHOCK WAVES IN THE EXPONENTIALLY DECREASING ATMOSPHERE

(51) International classification	:G06F0030200000, A61B0005045200, F02K0007140000, A01G0015000000, F42C0019080000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
The present invention relates to a method (100) for the propagation of the shock waves in the exponentially decreasing atmosphere. The method (100) includes steps of identifying (102) problems generated during propagation of the shock waves; collecting (104)and studying related literature; using (106) mathematical formulation to solve the problem generated during propagation of the shock waves; analyzing (108) and numerical solution of the mathematical model; interpretation (110) of results; generate (112) conclusion. The method (100) for the propagation of the shock waves in the exponentially decreasing atmosphere provides information about how the shock velocity varies in the absence of any body force as the shock waves propagate in the atmosphere, in which the density is decreasing exponentially. The method (100) for the propagation of the shock waves in the exponentially decreasing atmosphere can find an approximate analytic relation between the Mach number and the shock velocity.

No. of Pages : 16 No. of Claims : 5