

ePGS transmission for off-highway applications

FEV SIGNATURE SOLUTIONS

Our unique solution provides you with radical improvements of today's conventional systems

FEV offers

- Scalable modular transmission architecture
 - multiple motors
 - downsizing of engine & transmission
 - simultaneous charging & discharging
 - replacement of the speed section including launch clutch with an ePGS device
 - hybridization of an existing powershift transmission/CVT
 - can be used as pure BEV
 - for any applications, as agriculture and construction



Why FEV

- Proven functions applied to various vehicle applications and continuously optimized throughout the last 20 years
- In-house simulation tool chain including analytical layout, structural analysis (FEA) and 3D multibody simulation (MBS)
- Customization services for prototypes or series applications, including application and base software

ePGS transmission for off-highway application powertrain concept

MODULAR ARCHITECTURE



Engine

Over 25%~65%
downsizing possible



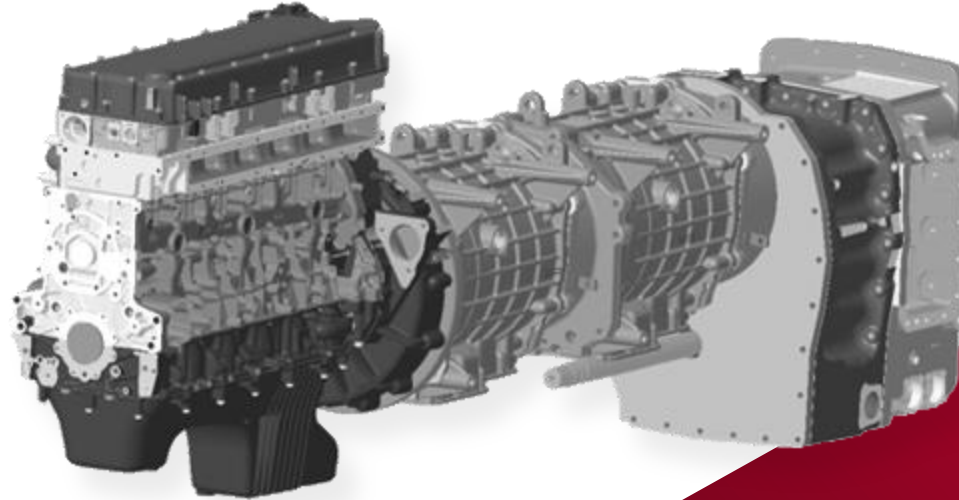
Motor

Modular system; both
single/multiple motor
possible



Transmission

Downsized system without
main clutch/torque
converter & speed section



Patent application
MODULAR POWERTRAIN
ARCHITECTURE
Chadha Manpreet
DE 10 2024 111 551 A1
(pending)

Single Motor Hybrid

- Engine downsizing potential up to 40%
- Transmission downsizing possible; clutch not needed
- Limited recuperation possible

Dual Motor Hybrid

- Engine downsizing potential up to 60%
- Transmission downsizing possible; clutch not needed
- Simultaneous charging/discharging; recuperation possible with full potential

Single Motor BEV

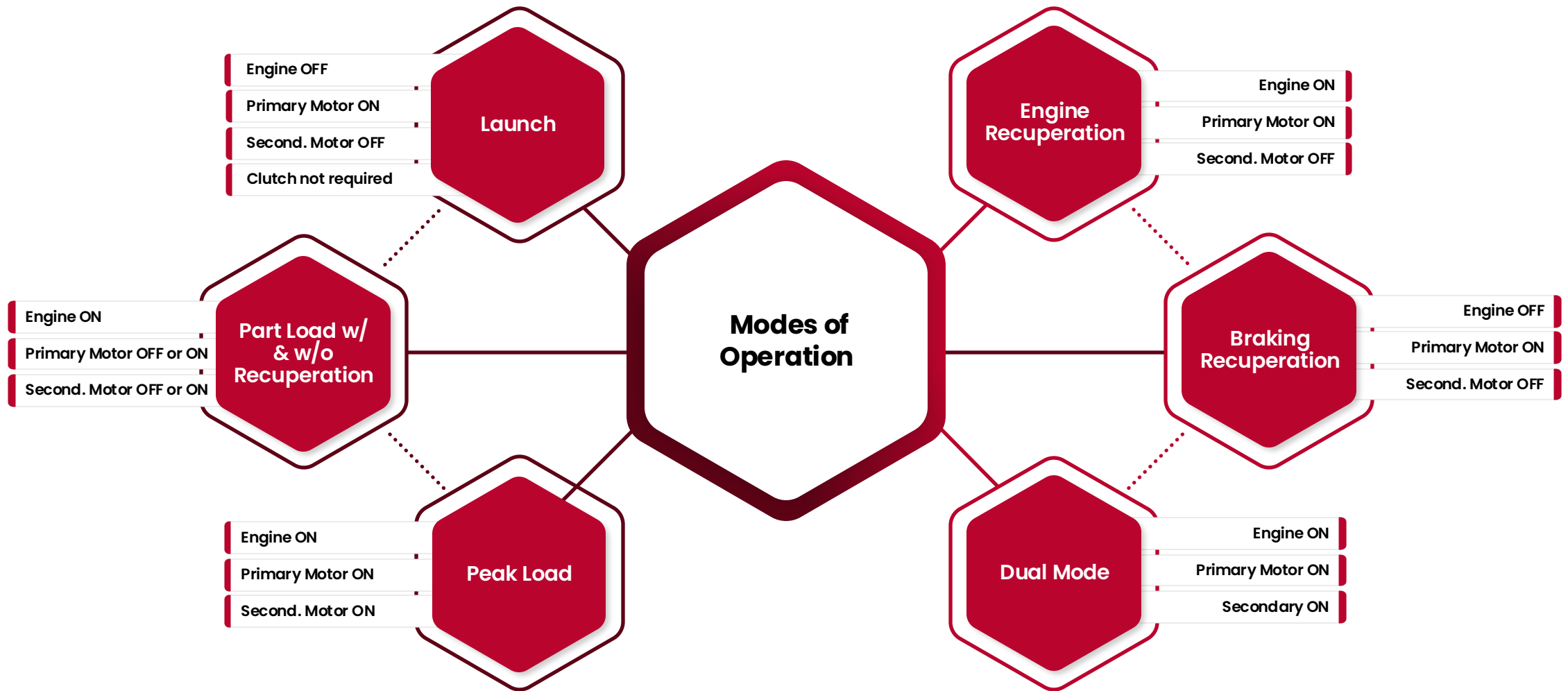
- Transmission downsizing possible
- Recuperation possible

Dual Motor BEV

- Transmission downsizing possible
- Multimode recuperation possible (via specific implements)

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MODES OF OPERATION



Get in touch with us for further information



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