

FEV Signature Solutions Control SW for hybrid powertrains

Our electrified powertrain control solutions enable you to quickly launch your product

FEV offers

- Comprehensive library of powertrain control software for electrified powertrains, including advanced predictive controls
- White box option to enable you to use FEV's solution as basis for your own development
- Customization services for prototypes or series applications
- Additional services as modification/extension, integration, commissioning and calibration



Why FEV

- Proven functions applied to various vehicle applications and continuously optimized throughout the last 20 years (see reference slide)
- Customization by FEV to exactly address customers' needs
- Customer friendly license model, as one time license fee and tailored license scope



Reference projects

FEV E-POWERTRAIN DOMAIN CONTROL



**POP2
Passenger Car**

(Series Development)



**Range Extender
HD Truck**

(Series Development)



**P2P3
HEV**

(Concept Car)



**Series Hybrid
Off-Highway**

(Series Development)



**P2P2.5P4
PHEV**

(Series Development)



**HEV Wheel
Loader**

(Concept Vehicle)



**POP4
Sports Car**

(Series Development)



**PIP4
Super Sports
Car**

(Concept Car)



**P2
Mini-Van**

(Series Development)



**POP2 Diesel
Hybrid LCV**

(Concept Car)



Patent application

Method for determining a drive energy distribution

DE 102021003990 A1



Patent application

Method for determining an optimum load point shift of a drive train in a hybrid vehicle

DE 102023105637 A1



Patent application

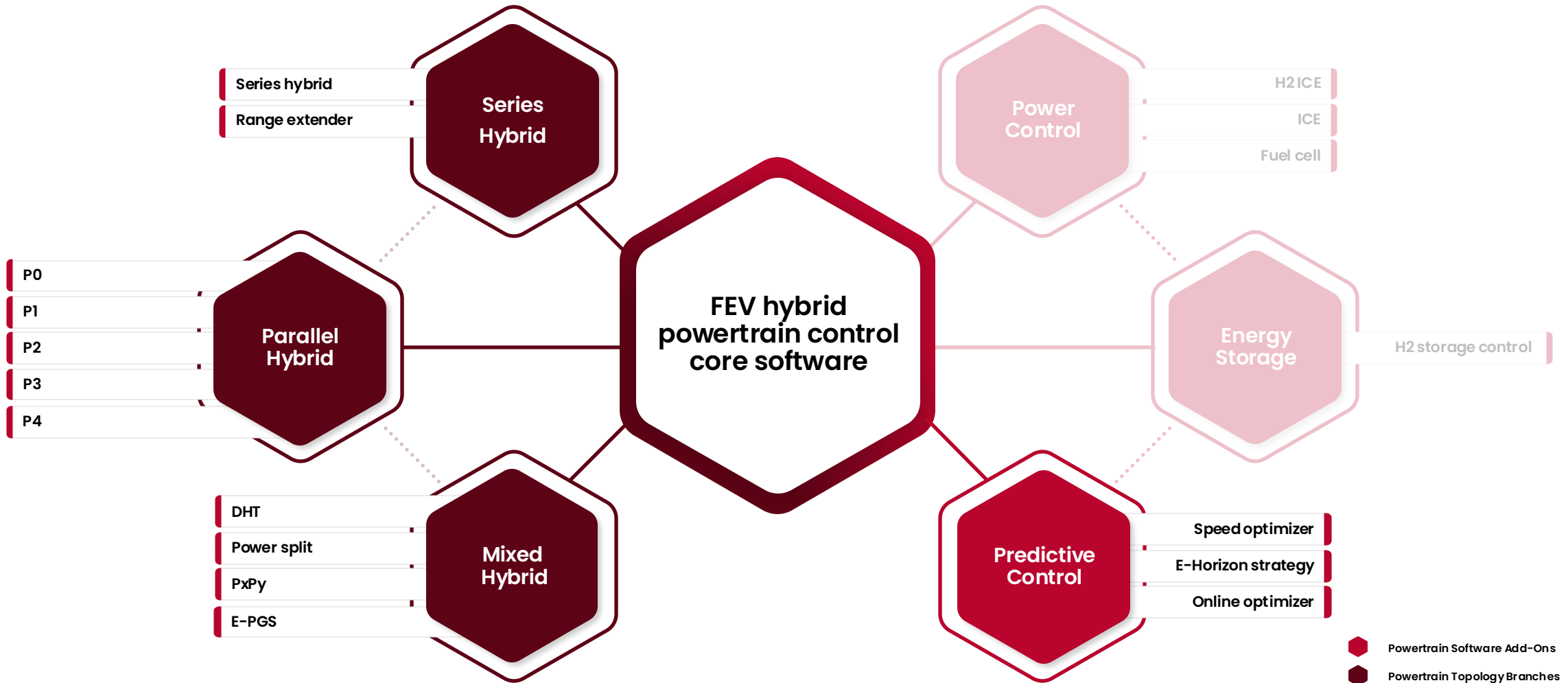
Method for controlling drive torques and hybrid drive

DE 102023124040 A1

FEV's control functions

Developed, defined and approved in FEV's software landscape

SERIES HCU SOFTWARE AS PART OF FEV'S POWERTRAIN CONTROL SOFTWARE



FEV's highlighted control functions

SERIES HCU SOFTWARE AS PART OF FEV'S POWERTRAIN CONTROL SOFTWARE



Vehicle coordination

Coordination of vehicle sub-systems and states, such as the low voltage, high voltage and powertrain activation states.

Predictive energy management

Predictive energy management, and power distribution for the electric powertrain system.

Torque management

Determination and arbitration of driver and AD system torque requests. Drivability filtering and torque distribution for enhanced performance, efficiency and comfort.

Powertrain state management

Coordination of powertrain state transitions considering efficiency, drivability and NVH.

Diagnostics

Monitoring of the system state and detection of possible faults. Coordination of the system reaction for maximum system availability.

Get in touch with us for further information



[www.fev.com/en/
signature-solutions](http://www.fev.com/en/signature-solutions)