

Title (en)
METHOD FOR RATIONALISING A CHAIN OF ELECTRIC COMPONENTS OF AN AIRCRAFT, IMPLEMENTATION ARCHITECTURE AND CORRESPONDING AIRCRAFT

Title (de)
VERFAHREN ZUR RATIONALISIERUNG EINER KETTE AUS ELEKTRISCHEN KOMPONENTEN EINES FLUGZEUGS, UMSETZUNGSARCHITEKTUR UND ENTSPRECHENDES FLUGZEUG

Title (fr)
PROCÉDÉ DE RATIONALISATION DE CHAÎNE DE COMPOSANTS ÉLECTRIQUES D'UN AÉRONEF, ARCHITECTURE DE MISE EN ŒUVRE ET AÉRONEF CORRESPONDANT

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Application
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Abstract (en)
[origin: WO2012160294A1] The invention relates to the execution of an architecture capable of rationalising the chain of electric components of an aircraft. The chain of components for transmitting electric power of an aircraft comprises an auxiliary power unit (APU) (10), main engines and end consumer systems (ECS) via power networks (R1, R2; LP1, LP2) and electronic links (EP1, EP2) controlled by a unit (U1). The APU (10) supplies power to a shaft (5a, 5) by a link (P1-P7; 14a, 15a; 14b, 15b; AF1-AF4) to at least one energy conversion unit (MC1, MC2), via a gearbox (8), each conversion unit comprising only one convertible electromechanical component (13a, 13b). The transmission of power takes place by a direct link to the gearbox (8) and to the end consumer system (ECS). The link between a converter unit (MC1, 11a, 13a; MC2, 11b, 13b) and the APU (10) is provided by coupling the shaft (5a, 5) of the APU (10) with the shaft (14a, 14b) of the starter/generator (13a, 13b) by directional power transmission (RL1-RL2-RL3) operating in one direction only (F1, F2, F3) from the shaft of the APU (10) to the shaft (14a, 14b) of the SG (13a, 13b).

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