

Titre de l'Invention	Code Pays	Type de Dossier	Statut	Numéro de la Demande	Date de Dépôt	Numéro de Brevet	Date de Délivrance	Date d'Expiration
Bougie d'allumage a électrode-navette <i>Spark plug with electrode-shuttle</i>	AU	PCT	Granted	2017371533	07/12/2017	2017371533	09/06/2022	07/12/2037
	CA	PCT	Published	3,046,393	07/12/2017			
	CH	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	CN	PCT	Granted	2017800823138	07/12/2017	CN110168825B	20/04/2021	07/12/2037
	DE	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	ES	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	FR	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	GB	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	IN	PCT	Granted	201927026611	07/12/2017	433561	02/06/2023	07/12/2037
	IT	EPP	Granted	502021000017003	07/12/2017	3560049	02/12/2020	07/12/2037
	JP	PCT	Granted	2019-530422	07/12/2017	7132923	30/08/2022	07/12/2037
	KR	PCT	Granted	10-2019-7019467	07/12/2017	2588000	06/10/2023	07/12/2037
	SE	EPP	Granted	17825896.8	07/12/2017	3560049	02/12/2020	07/12/2037
	WO	ORD	Published	PCT/FR2017/053453	07/12/2017			09/06/2019
	US	ORD	Granted	15/835489	08/12/2017	10116122	30/10/2018	08/12/2037
Préchambre d'allumage à clapet <i>Valve-controlled ignition prechamber</i>	FR	PRI	Granted	1750264	12/01/2017	3061743	16/08/2019	12/01/2037
	AU	PCT	Granted	2018207981	08/01/2018	2018207981	20/07/2023	08/01/2038
	CA	PCT	Published	3,048,883	08/01/2018			
	CN	PCT	Granted	2018800067417	08/01/2018	CN 110291278 B	05/11/2021	08/01/2038
	EP	PCT	Published	18713713.8	08/01/2018			
	IN	PCT	Granted	201927026779	08/01/2018	508823	08/02/2024	08/01/2038
	JP	PCT	Granted	2019-537092	08/01/2018	7214638	20/01/2023	08/01/2038
	KR	PCT	Granted	10-2019-7021691	08/01/2018	2581717	19/09/2023	08/01/2038
	US	ORD	Granted	15/864,735	08/01/2018	10,550,757	04/02/2020	08/01/2038
	WO	ORD	Published	PCT/FR2018/050041	08/01/2018			12/07/2019

Dispositif de rappel magnétique de clapet <i>Magnetic valve return device</i>	FR	PRI	Granted	1858111	10/09/2018	3085718	25/06/2021	10/09/2038
	AU	PCT	Granted	2019338970	30/08/2019	2019338970	05/06/2025	30/08/2039
	CA	PCT	Published	3111664	30/08/2019			
	CH	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	CN	PCT	Granted	2019800578258	30/08/2019	112654773	21/11/2023	30/08/2039
	DE	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	EP	PCT	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	ES	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	FR	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	GB	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	IN	PCT	Granted	202117008047	30/08/2019	502501	23/01/2024	30/08/2039
	IT	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	JP	PCT	Granted	2021-512640	30/08/2019	7394120	29/11/2023	30/08/2039
	KR	PCT	Granted	10-2021-7008534	30/08/2019	10-2822053	13/06/2025	30/08/2039
	SE	EPP	Granted	19778578.5	30/08/2019	3850201	22/05/2024	30/08/2039
	WO	ORD	Published	PCT/FR2019/052006	30/08/2019			
	US	ORD	Granted	16/564,285	09/09/2019	10,890,133	12/01/2021	09/09/2039
Insert d'allumage a préchambre active <i>Ignition insert with active prechamber</i>	FR	PRI	Granted	1904961	13/05/2019	3096079	18/11/2022	13/05/2039
	FR	ORD	Granted	1913531	29/11/2019	3096078	09/06/2023	29/11/2039
	US	ORD	Granted	16/869,680	08/05/2020	11,187,141	30/11/2021	08/05/2040
	WO	ORD	Published	PCT/FR2020/050790	13/05/2020			
	CN	PCT	Granted	202080033844	05/11/2021	CN 113795655	20/02/2024	13/05/2040
	CA	PCT	Published	3139564	08/11/2021			
	AU	PCT	Granted	2020276402	10/11/2021	2020276402	24/07/2025	13/05/2040
	IN	PCT	Pending	202117051450	10/11/2021			
	JP	PCT	Granted	JP2021-567056	10/11/2021	7590988	06/11/2024	13/05/2040
	KR	PCT	Published	10-2021-7036773	10/11/2021			
	CH	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	DE	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	EP	PCT	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	ES	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	FR	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	GB	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	IT	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040
	SE	EPP	Granted	20737511.4	15/11/2021	3969735	23/04/2025	13/05/2040

Préchambre d'allumage à clapet à sens de combustion inversé <i>Valve-controlled ignition pre-chamber with reversed combustion</i>	FR	PRI	Granted	2001508	14/02/2020	3107305	11/02/2022	14/02/2040
	CH	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	DE	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	EP	PCT	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	ES	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	FR	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	GB	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	IT	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	SE	EPP	Granted	21709457.2	04/02/2021	4103824	22/05/2024	04/02/2041
	WO	ORD	Published	PCT/FR2021/00009	04/02/2021			
	US	ORD	Granted	17/173,953	11/02/2021	11326509	10/05/2022	11/02/2041
	JP	PCT	Published	2022-540730	30/06/2022			
	IN	PCT	Pending	202217038432	04/07/2022			
	AU	PCT	Pending	2021219314	08/07/2022			
	CN	PCT	Published	2021800102770	20/07/2022			
	CA	PCT	Published	3166322	27/07/2022			
	KR	PCT	Published	10-2022-7026380	28/07/2022			
Mélangeur à recirculation forcée <i>Forced recirculation mixer</i>	FR	PRI	Granted	2004269	29/04/2020	3109803	05/05/2023	29/04/2040
	US	ORD	Granted	17/195,875	09/03/2021	11,293,385	05/04/2022	09/03/2041
	AU	PCT	Pending	2021265222	03/10/2022			
	IN	PCT	Pending	202217057663	08/10/2022			
	CA	PCT	Published	3176033	18/10/2022			
	JP	PCT	Granted	2022-564254	21/10/2022	7575484	21/10/2024	09/03/2041
	CH	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	DE	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	EP	PCT	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	ES	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	FR	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	GB	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	IT	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	SE	EPP	Granted	21715305.5	25/10/2022	4143428	07/05/2025	09/03/2041
	CN	PCT	Published	2021800310858	26/10/2022			
	KR	PCT	Published	10-2022-7037528	26/10/2022			

Platine-clapet à microbilles libres <i>Valve plate with free micro-balls</i>	FR	PRI	Granted	2010213	06/10/2020	2010213	29/12/2023	06/10/2040
	WO	ORD	Published	PCT/FR2021/051713	04/10/2021			
	US	ORD	Granted	17/494,332	05/10/2021	11549613	10/01/2023	05/10/2041
	CA	PCT	Published	3194507	31/03/2023			
	JP	PCT	Published	2023-520301	03/04/2023			
	EP	PCT	Published	21801586.5	05/04/2023			
	KR	PCT	Published	10-2023-7015471	04/05/2023			
	AU	PCT	Pending	2021358453	05/05/2023			
	IN	PCT	Pending	202317032058	05/05/2023			
	CN	PCT	Published	2021800760883	11/05/2023			
Clapet a téton de guidage <i>Guide stud valve</i>	FR	PRI	Granted	2010667	16/10/2020	3115323	12/05/2023	16/10/2040
	US	ORD	Granted	17/487,593	28/09/2021	11867114	09/01/2024	28/09/2041
	WO	ORD	Published	PCT/FR2021/051669	28/09/2021			
	CH	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	DE	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	EP	PCT	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	ES	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	FR	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	GB	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	IT	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	SE	EPP	Granted	21798080.4	05/04/2023	4229284	03/09/2025	28/09/2041
	CA	PCT	Published	3195332	11/04/2023			
	JP	PCT	Granted	2023-522496	12/04/2023	7731983		
	AU	PCT	Pending	2021362753	12/05/2023			
	IN	PCT	Pending	202317033907	15/05/2023			
	KR	PCT	Published	10-2023-7016459	15/05/2023			
	CN	PCT	Published	2021800783669	22/05/2023			

Insert de friction pour clapet orienté <i>Friction insert for an oriented valve</i>	FR	PRI	Published	2300390	16/01/2023			
	US	ORD	Granted	18/097,859	17/01/2023	12,320,292	03/06/2025	17/01/2043
	WO	ORD	Published	PCT/FR2024/050010	05/01/2024			
	CA	PCT	Pending	3280245	16/07/2025			
	IN	PCT	Pending	202517068926	18/07/2025			
	AU	PCT	Pending	2024209301	22/07/2025			
	EP	PCT	Published	24703063.8	22/07/2025			
	CN	PCT	Published	2024800104873	01/08/2025			
	KR	PCT	Published	10-2025- 7026408	06/08/2025			
	JP	PCT	Pending	2025-549531	22/08/2025			
Procédé d'injection d'un mélange gazeux comburant-carburant <i>Method for injecting a gaseous oxidizer-fuel mixture</i>	FR	PRI	Pending	FR2404917	14/05/2024			
	WO	ORD	Pending	PCT/EP2025/062282	06/05/2025			
	US	PRO	Pending	63/647,112	14/05/2024			14/05/2025
	US	ORD	Pending	19/189,811	25/04/2025			
Préchambre d'allumage à clapet orienté <i>Oriented valve ignition pre-chamber</i>	FR	PRI	Pending	FR2405175	21/05/2024			
	FR	ORD	Pending	FR2500850	27/01/2025			
	WO	ORD	Pending	PCT/EP2025/063099	13/05/2025			
	US	PRO	Pending	63/650,050	21/05/2024			21/05/2025
	US	ORD	Pending	19/198,949	20/05/2025			
Système d'alimentation en mélange carbure et son procédé de mise en œuvre <i>Fuel-air mixture supply system and its implementation method</i>	FR	PRI	Pending	FR2505059	13/05/2025			
	US	PRO	Pending	63/804,785	13/05/2025			13/05/2026