PATENTS

The following GPAINNOVA | Murua products are protected by one or more of the following patents in the U.S. and elsewhere. This page is intended to serve as notice under 35 U.S.C. § 287(a).





Murua Gold

Murua Silver Murua Universal

The products above are covered by one or more of the following patent and patent applications.

Removable electro-mechanical device for brushing and smoothing metal parts	Device for brunishing and smoothing metal parts
US10315284B2, EP3124157B1, CN106413962B, 08799,	US10344393B2, EP3124156B1, CN106457436B, 87991,
432663	436941

The following **GPAINNOVA | DLyte** products are protected by one or more of the following patents in the U.S. and elsewhere. This page is intended to serve as notice under 35 U.S.C. § 287(a).



The products above are covered by one or more of the following patent and patent applications.

Electropolishing device P201730370

Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method

AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY.191713-A, 2728367, 1801006589 A, 1-2018-04696, ZA2018/06563, 2018-554483, Use of H2SO4 as electrolyte in processes for smoothing and polishing metals by ion transport via free solids

EP3640373B1, EP4148166A2, 2019800039356, US10975491B2, 2750390, IL275330A, MY-193075-A, JP7045448B2, 423488, 2001004112A, 2020/05176

Use of HCL in dry electrolytes to polish Ti and other metal and alloys surfaces by ion transport <i>EP3640373B1</i>	Use of sulfonic acids in dry electrolytes to polish metal surfaces through ion transport EP3795722A4, US20210122941A1, US20220177730A1, CN 112534088 A, 2793181, JP2021520383A, 2020/099700, 2021/03076, 2101002626A, 202117021317 ^a	Method and device for dry treatment of metal surfaces by means of electrically active solid particles EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A
Device for the electropolishing of multiple free-moving items by means of solid elec- trolytes EP4074869A1, US20220364256A1, CN 115038821 A, IL294689A, 2022/07990, 202217043274A	Solid electrolyte for dry electropolishing of metals with activitu moderator <i>P202030082, EP4074868A1, US20220372648A1</i>	Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out
Metal electrodeposition method and elec- trolytic medium for electrodeposition <i>P202130186</i>	Direct current to asymmetrical square wave alternating current converter <i>P202130389</i>	Device and method for electropolishing by means of a conductive surface
Electrolytic medium for electropolishing and electropolishing method with said medium <i>P202130985</i>		

The following **GPAINNOVA | Electrolyte** products are protected by one or more of the following patents in the U.S. and elsewhere. This page is intended to serve as notice under 35 U.S.C. § 287(a).

01. DLyte

Product code	Nomenclature	Product code	Nomenclature	Product code	Nomenclature
DLY0X21020	DLYTE 01-MSA	DLY0X11000	DLYTE 01-S P	DLY1X0010	DLYTE MIX MSA-S G
DLY0X33029	DLYTE 01-MSA PLUS G T	DLY0X31020	DLYTE 01-MSA G	DLY1X0203	DLYTE MIX S-S G T
DLY0X21029	DLYTE 01-MSA PLUS	DLY1X0003	DLYTE MIX MSA PLUS-S	DLY0X31029	DLYTE 01-MSA PLUS G
DLY0X34029	DLYTE 01-MSA PLUS G U	DLY0X45000	DLYTE 02-S G	DLY1X0011	DLYTE MIX MSA PLUS-S G T
DLY0X21000	DLYTE 01-S	DLY1X0012	DLYTE MIX MSA PLUS M-S G T	DLY0X33000	DLYTE 01-S G T
DLY0X12000	DLYTE 02-S	DLY0X21028	DLYTE 01-MSA MINOR	DLY0X33020	DLYTE 01-MSA G T
DLY1X0101	DLYTE MIX S-S	DLY1X0202	DLYTE MIX S-S G	DLY1X0025	DLYTE MIX MSA PLUS-S FINE
DLY1X0007	DLYTE MIX MSA-S G T	DLY1X0100	DLYTE MIX S-S P	DLY0X45020	DLYTE 02-MSA G
DLY0X31000	DLYTE 01-S G	DLY0X23029	DLYTE 01-MSA PLUS T		

The products above are covered by one or more of the following patent and patent applications.

Electropolishing device P201730370	Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY-191713-A, 2728367, 1801006589 A, 1-2018- 04696, ZA2018/06563, 2018-554483, EP3372711B1, US10683583B2	Use of H2SO4 as electrolyte in processes for smoothing and polishing metals by ion trans- port via free solids EP3640373B1, EP4148166A2, 2019800039356, US10975491B2, 2750390, IL275330A, MY-193075-A, JP7045448B2, 423488, 2001004112A, 2020/05176
Use of HCL in dry electrolytes to polish Ti and other metal and alloys surfaces by ion transport <i>EP3640373B1</i>	Use of sulfonic acids in dry electrolytes to polish metal surfaces through ion transport EP3795722A4, US20210122941A1, US20220177730A1, CN 112534088 A, 2793181, JP2021520383A, 2020/099700, 2021/03076, 2101002626A, 202117021317A	Method for producing a dry electrolyte and dry electrolyte <i>P201930188</i>
Device for the electropolishing of multiple free-moving items by means of solid elec- trolytes EP4074869A1, US20220364256A1, CN 115038821 A, IL294689A, 2022/07990, 202217043274A	Solid electrolyte for dry electropolishing of metals with activity moderator <i>P202030082, EP4074868A1, US20220372648A1</i>	Method and device for dry treatment of metal surfaces by means of electrically active solid particles EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A
Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out	Metal electrodeposition method and elec- trolytic medium for electrodeposition <i>P202130186</i>	Device and method for electropolishing by means of a conductive surface

02. DLyte Suspension

Product code	Nomenclature	Product code	Nomenclature	Product c
DLY4X31130	DLYTE 01-MSA G L130	DLY4X31132	DLYTE 01-MSA G L132	DLY4X3393
DLY4X31131	DLYTE 01-MSA G L131	DLY4X21233	DLYTE 01-S L233	DLY4X3112
DLY4X31230	DLYTE 01-S G L230	DLY4X31231	DLYTE 01-S PLUS G L231	DLY4X3393
DLY4X31932	DLYTE MIX MSA G L932	DLY4X21120	DLYTE 01-MSA HIGH PLUS L120	DLY4X3180
DLY4X33230	DLYTE 01-S G L230 T	DLY4X31802	DLYTE 01 G L802	DLY4X3180
DLY4X45130	DLYTE 02-MSA G L130	DLY4X31803	DLYTE MIX G L803	DLY4X3380
DLY4X33130	DLYTE 01-MSA G L130 T	DLY4X33802	DLYTE 01 G L802 T	DLY4X3180
DLY4X31930	DLYTE MIX MSA G L930	DLY4X33803	DLYTE MIX G L803 T	DLY4X3380
DLY4X33930	DLYTE MIX MSA G L930 T	DLY4X31124	DLYTE 01-MSA G L124	

Product code	Nomenclature
DLY4X33933	DLYTE MIX G L933 T
DLY4X31125	DLYTE 01-MSA G L125
DLY4X33934	DLYTE MIX MSA G L934 T
DLY4X31806	DLYTE MIX G L806
DLY4X31807	DLYTE 01 G L807
DLY4X33807	DLYTE 01 G L807 T
DLY4X31800	DLYTE 01 G L800
DLY4X33800	DLYTE 01 G L800 T

The products above are covered by one or more of the following patent and patent applications

Electropolishing device P201730370	Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY:191713-A, 2728367, 1801006589 A, 1-2018- 04696, ZA2018/06563, 2018-554483, EP3372711B1, US10683583B2	Use of H2SO4 as electrolyte in processes for smoothing and polishing metals by ion trans- port via free solids EP3640373B1, EP4148166A2, 2019800039356, US10975491B2, 2750390, IL275330A, MY-193075-A, JP7045448B2, 423488, 2001004112A, 2020/05176
Use of HCL in dry electrolytes to polish Ti and other metal and alloys surfaces by ion transport <i>EP3640373B1</i>	Use of sulfonic acids in dry electrolytes to polish metal surfaces through ion transport EP3795722A4, US20210122941A1, US20220177730A1, CN 112534088 A, 2793181, JP2021520383A, 2020/099700, 2021/03076, 2101002626A, 202117021317A	Method for producing a dry electrolyte and dry electrolyte electrolyte <i>P201930188</i>
Method and device for dry treatment of metal surfaces by means of electrically active solid particles EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A	Device for the electropolishing of multiple free-moving items by means of solid elec- trolytes EP4074869A1, US20220364256A1, CN 115038821 A, IL294689A, 2022/07990, 202217043274A	Solid electrolyte for dry electropolishing of metals with activitu moderator <i>P202030082, EP4074868A1, US20220372648A1</i>
Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out	Metal electrodeposition method and elec- trolytic medium for electrodeposition <i>P202130186</i>	Device and method for electropolishing by means of a conductive surface

03. DLyte Hybrid

Product code	Nomenclature
DLY6X31900	DLYTE HYBRID H900

The products above are covered by one or more of the following patent and patent applications

Electropolishing device P201730370	Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY-191713-A, 2728367, 1801006589 A, 1-2018- 04696, ZA2018/06563, 2018-554483, EP3372711B1, US10683583B2	Use of H2SO4 as electrolyte in processes for smoothing and polishing metals by ion trans- port via free solids EP3640373B1, EP4148166A2, 2019800039356, US10975491B2, 2750390, IL275330A, MY-193075-A, JP7045448B2, 423488, 2001004112A, 2020/05176
Use of HCL in dry electrolytes to polish Ti and other metal and alloys surfaces by ion transport <i>EP3640373B1</i>	Use of sulfonic acids in dry electrolytes to polish metal surfaces through ion transport EP3795722A4, US20210122941A1, US20220177730A1, CN 112534088 A, 2793181, JP2021520383A, 2020/099700, 2021/03076, 2101002626A, 202117021317A	Method for producing a dry electrolyte and dry electrolyte and dry electrolyte <i>P201930188</i>
Method and device for dry treatment of metal surfaces by means of electrically active solid particles EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A	Device for the electropolishing of multiple free-moving items by means of solid elec- trolytes EP4074869A1, US20220364256A1, CN 115038821 A, IL294689A, 2022/07990, 202217043274A	Solid electrolyte for dry electropolishing of metals with activitu moderator <i>P202030082, EP4074868A1, US20220372648A1</i>
Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out	Device and method for electropolishing by means of a conductive surface	

04. DLyte Carbides

Product code	Nomenclature	Product code	Nomenclature
DLY4X31802	DLYTE 01 G L802	DLY4X31807	DLYTE 01 G L807
DLY4X31803	DLYTE MIX G L803	DLY4X33807	DLYTE 01 G L807 T
DLY4X33802	DLYTE 01 G L802 T	DLY4X31800	DLYTE 01 G L800
DLY4X33803	DLYTE MIX G L803 T	DLY4X33800	DLYTE 01 G L800 T
DLY4X31806	DLYTE MIX G L806		

The products above are covered by one or more of the following patent and patent applications

Electropolishing device P201730370	Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY-191713-A, 2728367, 1801006589 A, 1-2018- 04696, ZA2018/06563, 2018-554483, EP3372711B1,	Method and device for dry treatment of metal surfaces by means of electrically active solid particles EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A
	US10683583B2	F L . 1.4 P. 1 . 1919
Device for the electropolishing of multiple free-moving items by means of solid elec- trolytes EP4074869A1, US20220364256A1, CN 115038821 A,	Solid electrolyte for dry electropolishing of metals with activity moderator <i>P202030082, EP4074868A1, US20220372648A1</i>	Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out
IL294689A, 2022/07990, 202217043274A		
Metal electrodeposition method and electrolytic medium for electrodeposition	Device and method for electropolishing by means of a conductive surface	Electrolytic medium for electropolishing and electropolishing method with said medium
P202130186	ES2846299	P202130985
Method for producing a dry electrolyte and dry electrolyte		
P201930188		

05. DLyte Projection

Product code	Nomenclature
DLY5X31PR3	DLYTE 01-S G LPR3
DLY5X31PR1	DLYTE 01-MSA G LPR1
DLY5X33PR2	DLYTE MIX MSA-S G T LPR2

The products above are covered by one or more of the following patent and patent applications

Method for smoothing and polishing metals via ion transport by means of free solid bodies, and solid bodies for carrying out said method

AU2017255989A1, BR112018072155-7, CA3020196A1, 201780025853.2, 713729, 212017000070.8, IDP000076369, 262188, 402220, 10-2328076, 400698, MY-191713-A, 2728367, 1801006589 A, 1-2018-04696, ZA2018/06563, 2018-554483, EP3372711B1, US10683583B2 Method and device for dry treatment of metal surfaces by means of electrically active solid particles

EP3998375A1, US20220161382A1, CN 114514341 A, 2021/019121, 2022/02181, 202217008956A

Solid electrolyte for dry electropolishing of metals with activity moderator

P202030082, EP4074868A1, US20220372648A1

Electrolytic medium, electropolishing process using such electrolytic medium and device to carry it out

Metal electrodeposition method and electrolytic medium for electrodeposition

P202130186

Electrolytic medium for electropolishing and electropolishing method with said medium

P202130985

Method for producing a dry electrolyte and dry electrolyte

P201930188

The above Dlyte's consumable electrolyte products maybe used in combination with one or more of the DLyte machines as listed in the DLyte Machine section.