



## Transnet Patent List

### Patents and Patent Applications - Transnet Engineering

1. Patent and Patent Applications based on PCT Application No. PCT/IB2016/051876 entitled "REGENERATIVE RAILWAY BRAKING SYSTEM" with ANDREAS Pyper cited as an inventor.

Registered in the following countries:

Our Ref	Patent/ Application No.	Country/Region	Status
P00011/ZA	2017/07183	South Africa	Granted, in force
P00011/AU	2016242115	Australia	Granted, in force
P00011/CN	ZL20168003230 05	China	Granted, in force
P00011/CA	2 981 596	Canada	Pending
P00011/US	15/563600	United States of America	Granted, in force
P00011/EP-DE	3277535	Germany	Granted, in force
P00011/EP-ES	3277535	Spain	Granted, in force
P00011/EP-FR	3277535	France	Granted, in force
P00011/EP-GB	3277535	United Kingdom	Granted, in force

2. Patent and Patent Applications based on PCT Application No. PCT/ZA2019/050031 entitled "MULTIPIECE BOGIE" with MOLOI Vusimuzi Patrick; MAHEGU Peter Tshepiso and CARSTENS Marvin Osmund cited as inventors

Registered in the following countries:

Our Ref	Patent/ Application No.	Country/Region	Status
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P00049/ZA	2020/07534	South Africa	Granted, in force
P00049/OA	1202000451	*OAPI	Granted, in force
P00049/NG	NG/PT/C/2020/5086	Nigeria	Granted, in force

3. Patent entitled “RAILCAR KNUCKLE” with GOVENDER Dhurasha, PILAY Keshin, MALEKA Audrey Makgalake, MUKWEVHO Goodness, MATJEKE Velaphi Jeffrey and MAMPHEKGO Tefelo Calystus cited as inventors.

<b>Our Ref</b>	<b>Patent/ Application No.</b>	<b>Country/Region</b>	<b>Status</b>
P00010/AP	AP/P/2019/011720	***ARIPO	Pending

4. Patent entitled “A RAIL WAGON” with CRONJE Jan Abraham, MASEKO Njingane Vincent, NIEWOUDT Daniel Johannes and TSELE Molifi Ciwit cited as inventors.

Registered in the following countries:

<b>Our New Ref</b>	<b>Patent No.</b>	<b>Country</b>	<b>Status</b>
P00038/ZA	2016/00575	South Africa	Granted, in force

5. Patent entitled “METHOD OF WELDING FERRETIC STAINLESS STEELS” with MATJEKE Velaphi Jeffrey, MALEKA Makgalake Aubrey, PILAY Keshin, GOVENDER Dhurasha and MAMPHEKGO Tefelo Calystus cited as inventors.

Registered in the following countries:

<b>Our New Ref</b>	<b>Patent No.</b>	<b>Country</b>	<b>Status</b>
P00055ZA-2	2019/08422	South Africa	Granted, in force

6. Patent entitled “METHOD OF MANUFACTURING A HOLLOW RAILWAY AXLE” with MATJEKE Velaphi Jeffrey, MALEKA Makgalake Aubrey, MUKWEVHO Goodness, PILAY Keshini, GOVENDER Dhurasha and MAMPHEKGO Tefelo Calystus cited as inventors.



Registered in the following countries:

<b>Our New Ref</b>	<b>Patent No.</b>	<b>Country</b>	<b>Status</b>
P00056/ZA	2019/06802	South Africa	Granted, in force

- Patent entitled "END CAP" with MATJEKE Velaphi Jeffrey, MALEKA Makgalake Audrey, MUKWEVHO Goodness, PILLAY Keshini, GOVENDER Dhurasha, MAMPHEKGO Tefelo Calystus and TAPALA Sibonokuhle cited as inventors.

Registered in the following countries:

<b>Our Ref</b>	<b>Patent No.</b>	<b>Country</b>	<b>Status</b>
P00098/ZA	2020/02474	South Africa	Granted, in force

- Patent entitled "PROTECTIVE MEMBER" with VAN HEERDEN Neil cited as inventor.

Registered in the following countries:

<b>Our New Ref</b>	<b>Patent No.</b>	<b>Country</b>	<b>Status</b>
P00122/ZA	2020/07278	South Africa	Granted, in force

### **Patents and Patent Applications – Transnet Freight Rail**

- Patent and Patent Applications Family based on PCT Application no. PCT/ZA2021/050018 entitled "VISUAL INDICATOR DEVICE, SYSTEM FOR MONITORING THE VISUAL INDICATOR AND METHOD THEREOF" with DZHIVHUVU Humbulani Percy, TALANE Ngwato Johannes, MATLOGA Sharon Dineo, SIBIYA Dumisani Bernard, MAKHUBELA Themba James, NGCONGCA Nonkululeko and KENNEDY Alexay Allister cited as inventors.

Registered in the following countries:

<b>Our Ref</b>	<b>Patent Appl. no.</b>	<b>Country/Region</b>	<b>Status</b>
P00060WO-ZA	2022/10627	South Africa	Pending



P00060WO-AP	AP/P/2022/01440 1	****ARIPO	Pending
P00060WO-BR	112022018787-4	Brazil	Pending
P00060WO-DZ	220763	Algeria	Pending
P00060WO-EG	PCT 1347/2022	Egypt	Pending
P00060WO-IN	202217052866	India	Pending
P00060WO-MA	57934	Morocco	Pending

\*\*\*\*ARIPO Designated countries: Tanzania and Kenya