WE CLAIM:

1. A lifting mechanism (200) for raising and lowering of an instrument transformer in a switchgear assembly, said lifting mechanism (200) consisting of~~comprising~~:

- a frame structure (201) consisting of ~~comprising~~:
  - a pair of vertical guideways (201A, 201B) spaced apart;
  - a horizontal support member (201C) connecting said vertical guideways (201A, 201B), said horizontal support member (201C) is disposed at an operative top of said vertical guideways (201A, 201B); and
  - a base (201D) configured to support said vertical guideways (201A, 201B), said base (201D) is disposed at an operative bottom of said vertical guideways (201A, 201B), said base (201D) consisting of ~~comprising at least one~~a closable opening;

said lifting mechanism (200) characterized in that:

- a driven assembly (202) mounted in the upper portion of said vertical guideways (201A, 201B), said driven assembly (202) is coupled with a trolley (203) to perform raising and lowering of said trolley (203), wherein said instrument transformer (204 (R, Y, B)) is coupled with said trolley (203); and
- a drive assembly (206) functionally coupled with said driven assembly (202), said drive assembly (206) configured to actuate said driven assembly (202).

2. The lifting mechanism (200) as claimed in claim 1, wherein said driven assembly (202) comprises:

- a horizontal shaft (202A) mounted on said vertical guideways (201A, 201B);
- ~~at least one~~a lifting element (202B) mounted on said horizontal shaft (202A) and functionally coupled with said trolley (203); and
- a driven element (202E) mounted on said horizontal shaft (202A) and functionally coupled with said drive assembly (202).

3. The lifting mechanism (200) as claimed in claim 2, wherein said lifting element (202B) and said drive element (202E) are one of a chain-sprocket arrangement and a belt-pulley arrangement.

4. The lifting mechanism (200) as claimed in claim 1, wherein said drive assembly (206) comprises:

- a drive element (206B) functionally coupled with said driven assembly (202) and adapted to actuate said driven assembly (202); and
- a drive means (206D) functionally coupled with said drive element via a gear drive, said drive means (206D) is adapted to actuate said drive element.

5. The lifting mechanism (200) as claimed in claim 4, wherein said drive element (206B) is one of a chain-sprocket arrangement and a belt-pulley arrangement.

6. The lifting mechanism (200) as claimed in claim 5, wherein said drive means (206D) is one of a handle and a motor adapted for actuation of said drive element (206B).

7. The lifting mechanism (200) as claimed in claim 4, wherein said gear drive is one of a worm-wheel drive, a spur gear train, a helical gear train, and a bevel gear drive.

8. The lifting mechanism (200) as claimed in claim 1, wherein said closable opening (201E) is adapted to remain close when said instrument transformer is isolated.

Dated this 31st day of March, 2015

MOHAN DEWAN, IN/PA-25
OF R. K. DEWAN & CO.
APPLICANTS' PATENT ATTORNEY

WE CLAIM:

1. A lifting mechanism (200) for raising and lowering of an instrument transformer in a switchgear assembly, said lifting mechanism (200) consisting of:

- a frame structure (201) consisting of :
  - a pair of vertical guideways (201A, 201B) spaced apart;
  - a horizontal support member (201C) connecting said vertical guideways (201A, 201B), said horizontal support member (201C) is disposed at an operative top of said vertical guideways (201A, 201B); and
  - a base (201D) configured to support said vertical guideways (201A, 201B), said base (201D) is disposed at an operative bottom of said vertical guideways (201A, 201B), said base (201D) consisting of a closable opening;

said lifting mechanism (200) characterized in that:

- a driven assembly (202) mounted in the upper portion of said vertical guideways (201A, 201B), said driven assembly (202) is coupled with a trolley (203) to perform raising and lowering of said trolley (203), wherein said instrument transformer (204 (R, Y, B)) is coupled with said trolley (203); and
- a drive assembly (206) functionally coupled with said driven assembly (202), said drive assembly (206) configured to actuate said driven assembly (202).

2. The lifting mechanism (200) as claimed in claim 1, wherein said driven assembly (202) comprises:

- a horizontal shaft (202A) mounted on said vertical guideways (201A, 201B);
- a lifting element (202B) mounted on said horizontal shaft (202A) and functionally coupled with said trolley (203); and
- a driven element (202E) mounted on said horizontal shaft (202A) and functionally coupled with said drive assembly (202).

3. The lifting mechanism (200) as claimed in claim 2, wherein said lifting element (202B) and said drive element (202E) are one of a chain-sprocket arrangement and a belt-pulley arrangement.

4. The lifting mechanism (200) as claimed in claim 1, wherein said drive assembly (206) comprises:

- a drive element (206B) functionally coupled with said driven assembly (202) and adapted to actuate said driven assembly (202); and
- a drive means (206D) functionally coupled with said drive element via a gear drive, said drive means (206D) is adapted to actuate said drive element.

5. The lifting mechanism (200) as claimed in claim 4, wherein said drive element (206B) is one of a chain-sprocket arrangement and a belt-pulley arrangement.

6. The lifting mechanism (200) as claimed in claim 5, wherein said drive means (206D) is one of a handle and a motor adapted for actuation of said drive element (206B).

7. The lifting mechanism (200) as claimed in claim 4, wherein said gear drive is one of a worm-wheel drive, a spur gear train, a helical gear train, and a bevel gear drive.

8. The lifting mechanism (200) as claimed in claim 1, wherein said closable opening (201E) is adapted to remain close when said instrument transformer is isolated.

Dated this 31st day of March, 2015.
MOHAN DEWAN, IN/PA-25
OF R. K. DEWAN & CO.
APPLICANTS' PATENT ATTORNEY

NAME: DESHPANDE MANOHAR VISHWANATH
& DESHPANDE PARIKSHIT MANOHAR

NO. OF SHEETS: 05

SHEET NO. : 1

NO :1272/MUM/2015

COMPLETE SPECIFICATION

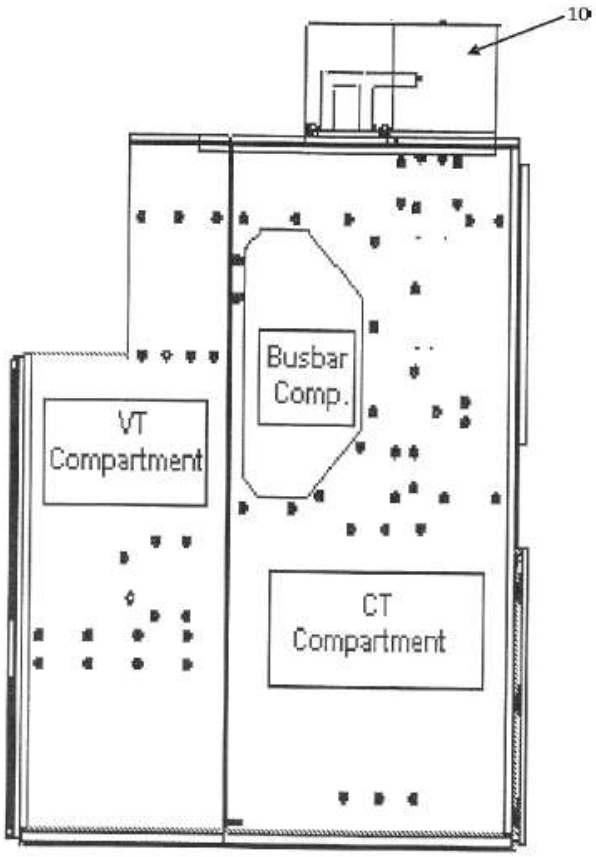

Fig. 1
(PRIOR ART)

MOHAN DEWAN, IN/PA- 25
OF R. K. DEWAN & CO.
APPLICANT'S PATENT ATTORNEY

NAME: DESHPANDE MANOHAR VISHWANATH
& DESHPANDE PARIKSHIT MANOHAR

NO. OF SHEETS: 05

SHEET NO. : 2

NO :1272/MUM/2015

COMPLETE SPECIFICATION

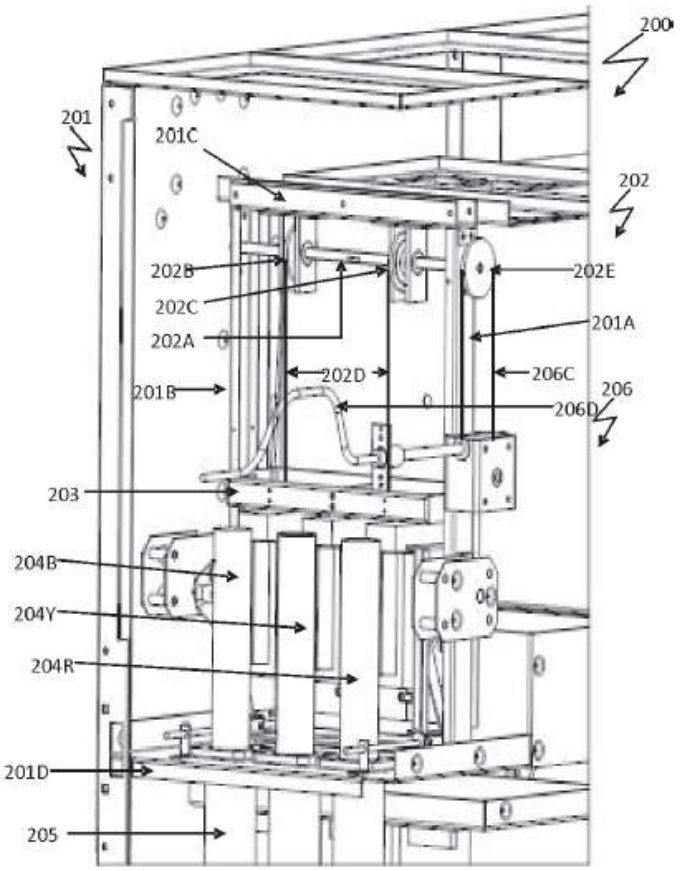

Fig 2

MOHAN DEWAN, IN/PA- 25
OF R. K. DEWAN & CO.
APPLICANT'S PATENT ATTORNEY

NAME: DESHPANDE MANOHAR VISHWANATH
& DESHPANDE PARIKSHIT MANOHAR

NO. OF SHEETS: 05

SHEET NO. : 3

NO :1272/MUM/2015

COMPLETE SPECIFICATION

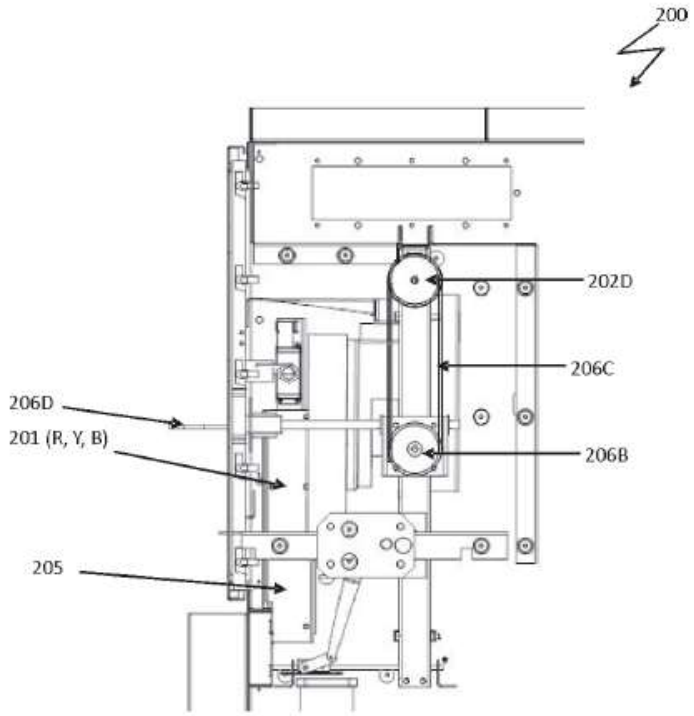

Fig. 3

MOHAN DEWAN, IN/PA- 25
OF R. K. DEWAN & CO.
APPLICANT'S PATENT ATTORNEY

NAME: DESHPANDE MANOHAR VISHWANATH
& DESHPANDE PARIKSHIT MANOHAR

NO. OF SHEETS: 05

NO :1272/MUM/2015

SHEET NO. : 4

COMPLETE SPECIFICATION

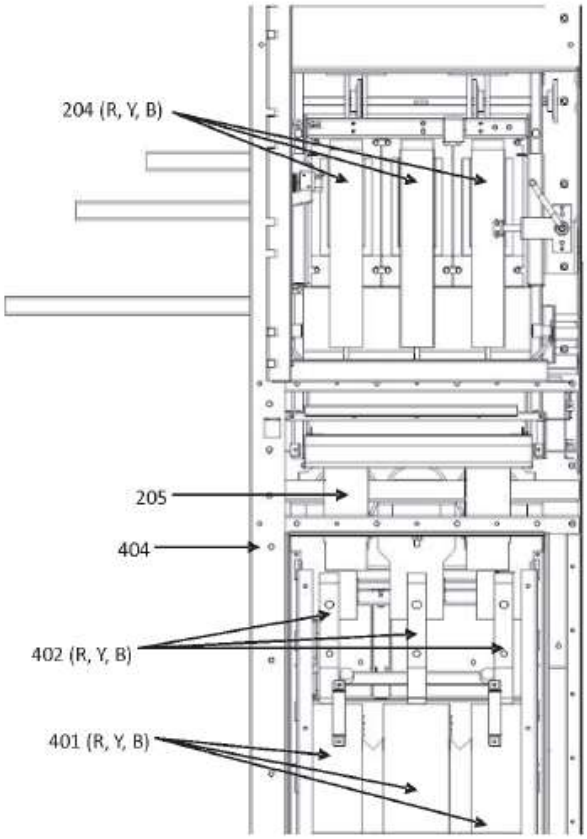

Fig. 4

MOHAN DEWAN, IN/PA- 25
OF R. K. DEWAN & CO.
APPLICANT'S PATENT ATTORNEY

NAME: DESHPANDE MANOHAR VISHWANATH
& DESHPANDE PARIKSHIT MANOHAR

NO. OF SHEETS: 05

SHEET NO. : 5

NO :1272/MUM/2015

COMPLETE SPECIFICATION

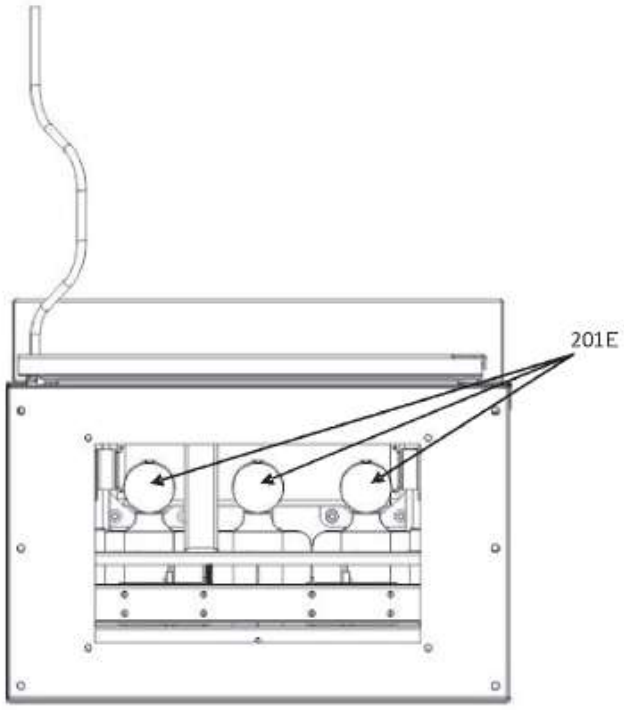

Fig. 5

MOHAN DEWAN, IN/PA- 25
OF R. K. DEWAN & CO.
APPLICANT'S PATENT ATTORNEY