

Frequency Analysis of Applied Manual codes

Manual Codes are important to use when searching *Derwent World Patents Index*[®] because they cover both the novel technical details disclosed within the patent, and the invention's application. They enable an extra level of precision and accuracy that isn't possible by using International Patent Classification codes (IPCs) alone.

In January of this year, we revised the codes to ensure that they reflect the very latest technological developments, including the addition of new codes in section E. (For the full list of revisions, go to: www.scientific.thomson.com/media/scpdf/cpi-2005-codes-final.pdf).

Whilst conducting frequency analysis of our existing manual codes before the revision, in late 2004, we noticed that two codes in section E appeared much more frequently than any of the others. Figure 1, shows the ranking of the top 10 most commonly applied codes in section E.

Figure 1 – Ranking of top 10 applied codes in section E, 2004

Code	Description	Ranking	No.
E11-Q02	Removal, effluent treatment	1	3456
E11-Q01	Separation, extraction, recovery, purification	2	1838
E05-M	2nd Transition Metal series organics, general	3	1677
E31-P03	Use of silica, other than mixture with alumina	4	1634
E31-A02	H ₂ production or storage	5	1343
E05-N	3rd Transition Metal series organics, general	6	1222
E34-C02	Use of Aluminium oxide or hydroxide	7	1076
E31-H01	Catalytic removal of nitrogen oxides from waste gases etc.	8	1045
E05-E01	Heterocyclic or aromatic with Si-C bond	9	1037
E05-A	Organo Lithium, Sodium, Potassium, Rubidium, Cesium compounds	10	952

The top two most applied codes in section E were E11-Q01 (Separation, extraction, recovery, purification) and E11-Q02 (Removal, effluent treatment). The latter is by far the most applied code e.g. it is on 47% more documents than the next most applied code E11-Q01.

During the revision we subdivided them into the following hierarchy, in order to enhance the capability of a more focused search in these areas:

E11-Q01 - Separation, extraction, recovery, purification
↳E11-Q01A - Purification by chemical means
↳E11-Q01B - Purification by physical means

E11-Q02 - Removal, effluent treatment
↳E11-Q02A - Engine exhaust treatment
↳E11-Q02B - Industrial effluent treatment
↳E11-Q02C - Other

After frequency analysis of the codes in 2005, these subdivisions have justified their inclusion. Analysis shows that E11-Q02 is no longer the most applied code, currently ranked 2nd, and that E11-Q01 has dropped out of the top five altogether and now ranked 7th (See Figure 2).

This can only be good news for searching as it will aid in the elimination of extraneous data in returned results.

Figure 2 – Ranking of top 10 applied codes in section E, 2005

Code	Description	Ranking	No.
E31-P03	Use of silica, other than mixture with alumina	1	210
E11-Q02	Removal, effluent treatment	2	166
E31-H01	Catalytic removal of nitrogen oxides from waste gases etc.	3	145
E34-C02	Use of Aluminium oxide or hydroxide	4	145
E11-Q02A	Engine exhaust treatment	5	142
E11-E	Oxidation, dehydrogenation	6	132
E11-Q01	Oxidation, dehydrogenation	7	129
E35-C	Zinc compound	8	110
E31-N05C	Carbon dioxide	9	105
E35-K02	Titanium dioxide, use	10	104

As of March 2005

The methodology used to highlight the need for the above split will also be applied to this years review.

Thomson Scientific is committed to yearly revisions of the codes, and welcomes any suggestions from users. If you would like to submit suggestions, please send them to us at cpicode.revision@derwent.co.uk