## CoCoALib - Feature \#515

## Fn to "flatten" muliple polynomial extns

02 Apr 2014 18:30 - John Abbott

| Status: | New | Start date: | 02 Apr 2014 |  |
| :---: | :---: | :---: | :---: | :---: |
| Priority: | Normal | Due date: |  |  |
| Assignee: |  | \% Done: | 0\% |  |
| Category: | New Function | Estimated time: | 0.00 ho |  |
| Target version: | CoCoALib-1.0 | Spent time: | 0.25 ho |  |
| Description |  |  |  |  |
| In C5 a user can easily create a ring like $Q Q[x][y]$ which is obviously isomorphic to $Q Q[x, y]$. CoCoA can do many operations on elements of the second ring, but would be stuck given the first ring (e.g. factorization, sqfrfactor, gcd) |  |  |  |  |
| To make impl simpler have a fn which given a ring like $Q Q[x][y]$ produces a single-level poly extn together with two isomorphisms to move values back and forth. |  |  |  |  |
| We'd also need fn to tell whether a ring is a multiple poly extn. |  |  |  |  |
| Related issues: |  |  |  |  |
| Related to CoCoALib - Feature \#47: Squarefree factorization - multivariate po... |  |  | Closed | 30 Nov 2011 |
| Related to CoCoALib - Feature \#516: Make squarefreefactor work in multiple po... |  |  | New | 02 Apr 2014 |

## History

\#1-02 Apr 2014 18:39 - John Abbott
Once this has been impl'ed (if), we should go back and finish those issues which needed the capability. See the related issues list!

## \#2-10 Jul 2014 14:22 - John Abbott

- Target version changed from CoCoALib-0.99534 Seoul14 to CoCoALib-1.0

