Partitioning the Z Part of CSP_Z Specifications

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De¯nition	Explanation
STOP	A basic process which never communicates neither progress. It denotes a deadlock.
®*P*	Denotes the *alphabet* of a process: the set of all events found in its body.
initials(*P*)	Gives the set ce2TDa003.00G0.4w20.05-564.82TD51.51nitialsa10w20.05-51850TD[(of!J/F5 d2(Giv)TD[(A)pr

S_p is built (or prede¯ned in cases such as deadlock-freedom) as abstract as possible exhibiting the desired property p. This is exactly implemented in the FDR tool [7], where some basic processes (such as the deadlock-free or divergence-free processes) are used for determining properties of arbitrary processes.

This re¯nement checking is also true for

abstraction. This originates a renaming relation *R* | the interface abstraction | that preserves the names of the channels and maps in¯nite events to ¯nite ones. Provided that *R* satis¯es the minimum cardinalities required by P_{CSP}, the image of *R* (*ran R*)

Law 3.2 ($\parallel_X$-commutes) *Let P and Q be CSP processes. Then,*

$$P \parallel_X Q = Q \parallel_X P$$

}

Law 3.4 (*2*-step)

$(?x : A \; ! \; P)$

$\underset{\circledR P}{jj}((2_i\ ^2 b_i\ \&\ ev_i\ \ !\ \ P)\ 2\ b_{n+1}\ \&\ ev_{n+1}\ \ !\ \ P)$ (by Lemma 3.5)

´ $(2_{i+1}\ ^2 a_i\ \&\ ev_i\ \ !\ \ P)$

$\underset{\circledR P}{jj}(2_{i+1}\ ^2 b_i\ \&\ ev_i\ \ !\ \ P)$

$\underset{\circledR P}{jj}(2_{i+1}\ ^2 b_i\ \&\ ev_i\ \ !\ \ +1^2 b_i\ \&\ ev!P$

´ $P^{di}[\![R$