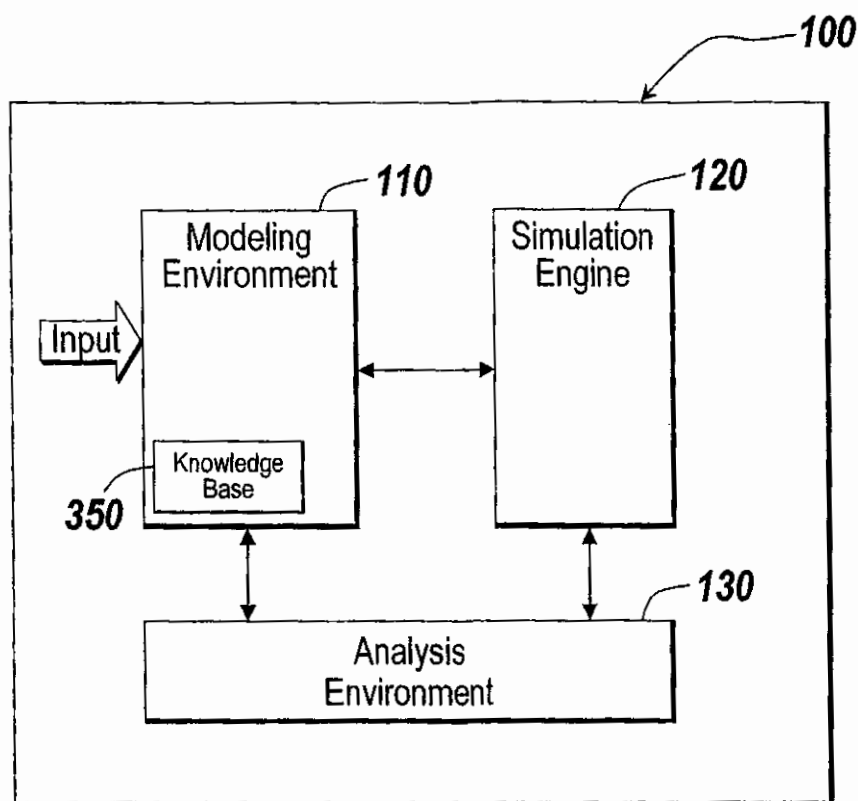
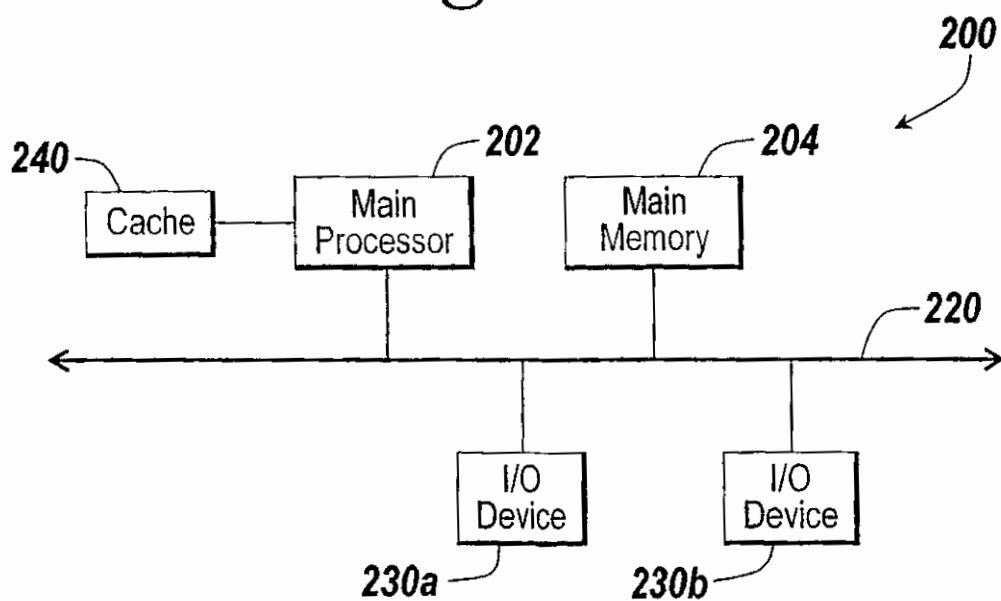
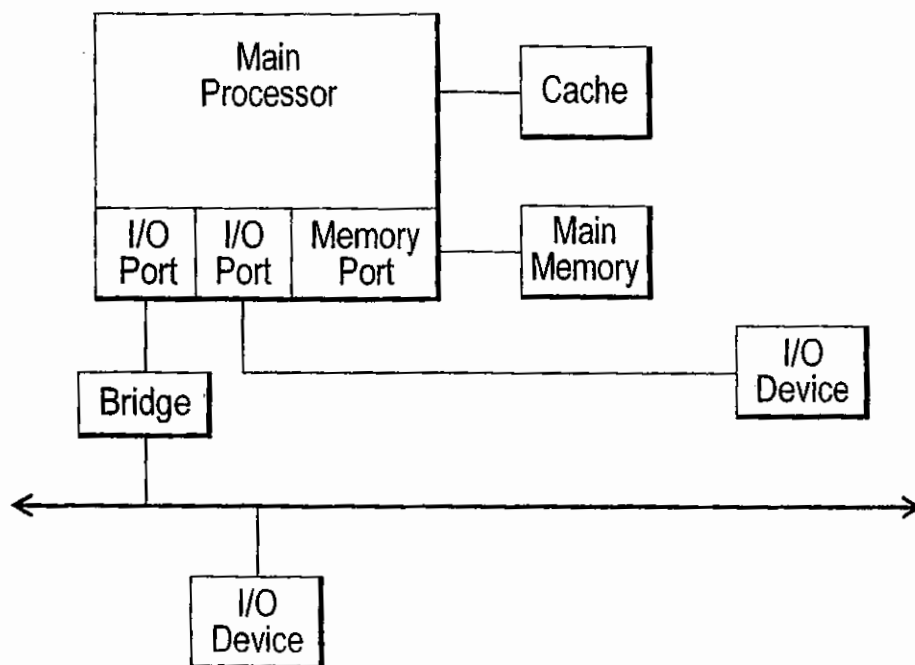


*Fig. 1**Fig. 2A*

*Fig. 2B*

300

Simbiotic

File

Models

- FieldKorosNoyesModel
- Compartment
- Reactions
 - Reaction1
 - Reaction2
 - Reaction3
 - Reaction4
 - Reaction5
- Species
 - Br
 - BrO3
 - Ce
 - HBrO2
 - HOBr

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316

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Reaction Table	Reaction	Kinetic Law	Parameter	Reversible
Br + BrO3 -> HBrO2 + HOBr	$\text{Br} + \text{BrO}_3 \rightarrow \text{HBrO}_2 + \text{HOBr}$	$\text{Br} \cdot \text{BrO}_3 \cdot k_1$	k1	false
Br + HBrO2 -> HOBr	$\text{Br} + \text{HBrO}_2 \rightarrow \text{HOBr}$	$\text{Br} \cdot \text{HBrO}_2 \cdot k_2$	k2	false
BrO3 + HBrO2 -> Ce + HBrO2	$\text{BrO}_3 + \text{HBrO}_2 \rightarrow \text{Ce} + \text{HBrO}_2$	$\text{BrO}_3 \cdot \text{HBrO}_2 \cdot k_3$	k3	false
HBrO2 -> BrO3 + HOBr	$\text{HBrO}_2 \rightarrow \text{BrO}_3 + \text{HOBr}$	$\text{HBrO}_2 \cdot k_4$	k4	false
Ce -> Br	$\text{Ce} \rightarrow \text{Br}$	$\text{Ce} \cdot k_5$	k5	false

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Species Table	Name	Initial Amount	Constant
Br	Br	0.003	false
BrO3	BrO3	0.1	false
Ce	Ce	0.05	false
HBrO2	HBrO2	0.001	false
HOBr	HOBr	0	false

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Fig. 3A

Models

heatshock

Reactions

Species

> DnaK

> FtsH

> HslVU

> Pfoided

> Protease

> Punfolded

> Punfolded DnaK

> RNAP

> mRNA_DnaK

> mRNA_FtsH

> mRNA_HslVU

> mRNA_Protease

> mRNA_s32

> null

> pg

> ph

> s32

> s70

> s32:DnaK

> s32:RNAP

> s32:RNAP:ph

> s70:RNAP

> s70:RNAP:pg

Reaction Table	Kinetic Law	Parameter	Reversible
s70 + RNAP -> s70:RNAP	Mass Action	K	true
pg + s70:RNAP -> s70:RN..	Mass Action	K	true
s70:RNAP:pg -> mRNA_s32	Mass Action	K	false
mRNA_s32 -> null	Mass Action	K	true
mRNA_s32 -> s32	Mass Action	K	false
s32 -> null	Mass Action	K	true
s32 + RNAP -> s32:RNAP	Mass Action	K	true
ph + s32:RNAP -> s32:RN..	Mass Action	K	true
s32:RNAP:ph -> mRNA_DnaK	Mass Action	K	false
mRNA_DnaK -> null	Mass Action	K	true
mRNA_DnaK -> DnaK	Mass Action	K	false
DnaK -> null	Mass Action	K	true
s32 + DnaK -> s32:DnaK	Mass Action	K	true
Punfolded + DnaK -> Punfo...	Mass Action	K	true
Punfolded:DnaK + Pfoided ...	Mass Action	K	true
Pfoided -> Punfolded	Mass Action	K	true
s32:RNAP:ph -> mRNA_FtsH	Mass Action	K	true
mRNA_FtsH -> null	Mass Action	K	false
mRNA_FtsH -> FtsH	Mass Action	K	true
FtsH -> null	Mass Action	K	false
s32:RNAP:ph -> mRNA_HslVU	Mass Action	K	true
mRNA_HslVU -> null	Mass Action	K	false
mRNA_HslVU -> HslVU	Mass Action	K	true
HslVU -> null	Mass Action	K	false
S32:RNAP:ph -> mRNA_Pro...	Mass Action	K	true

Species Table	Name	Initial Amount	Constant
DnaK		0	false
FtsH		0	false
HslVU		0	false
Pfoided		17800	false
Protease		0	false
Punfolded		0	false
Punfolded:DnaK		0	false
RNAP		1337.6174	false
mRNA_DnaK		0	false
mRNA_FtsH		0	false
mRNA_HslVU		0	false
mRNA_Protease		0	false
mRNA_s32		0	false
null		0	false

Fig. 3B

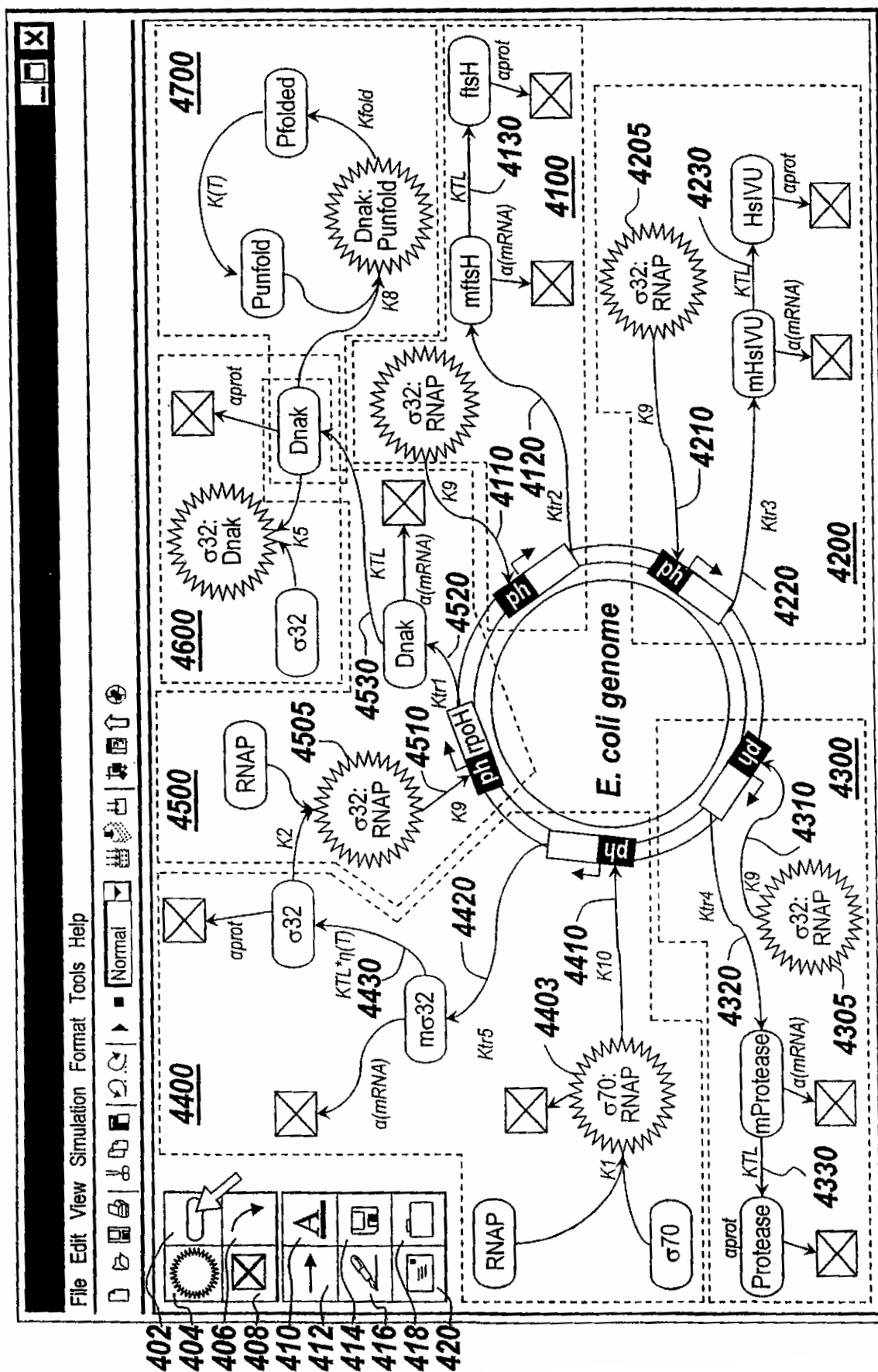
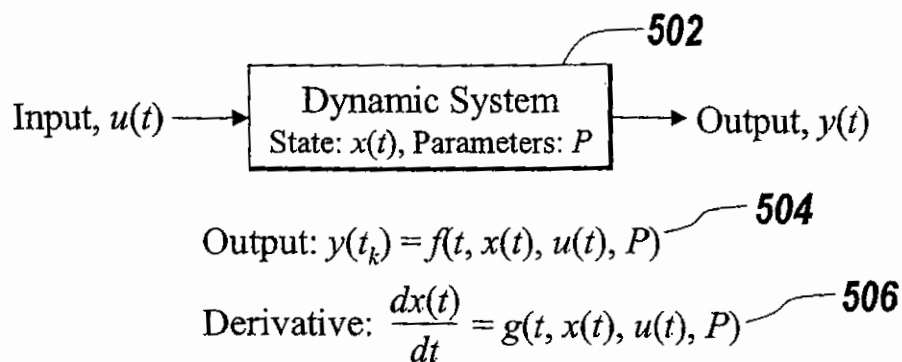
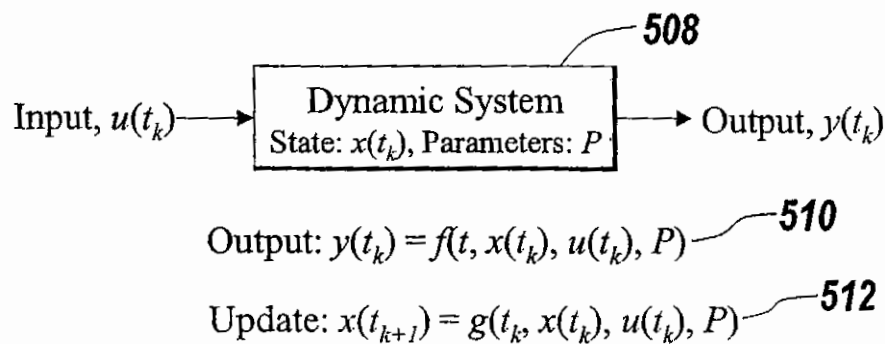
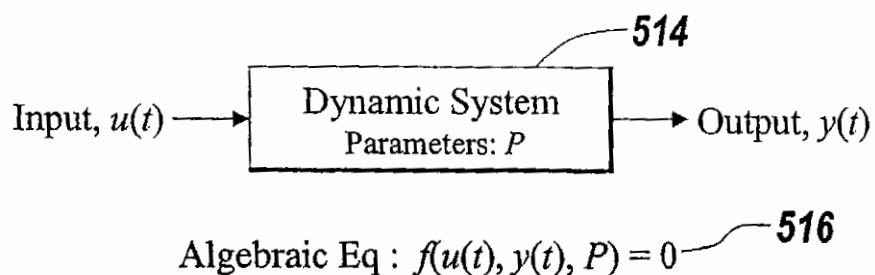
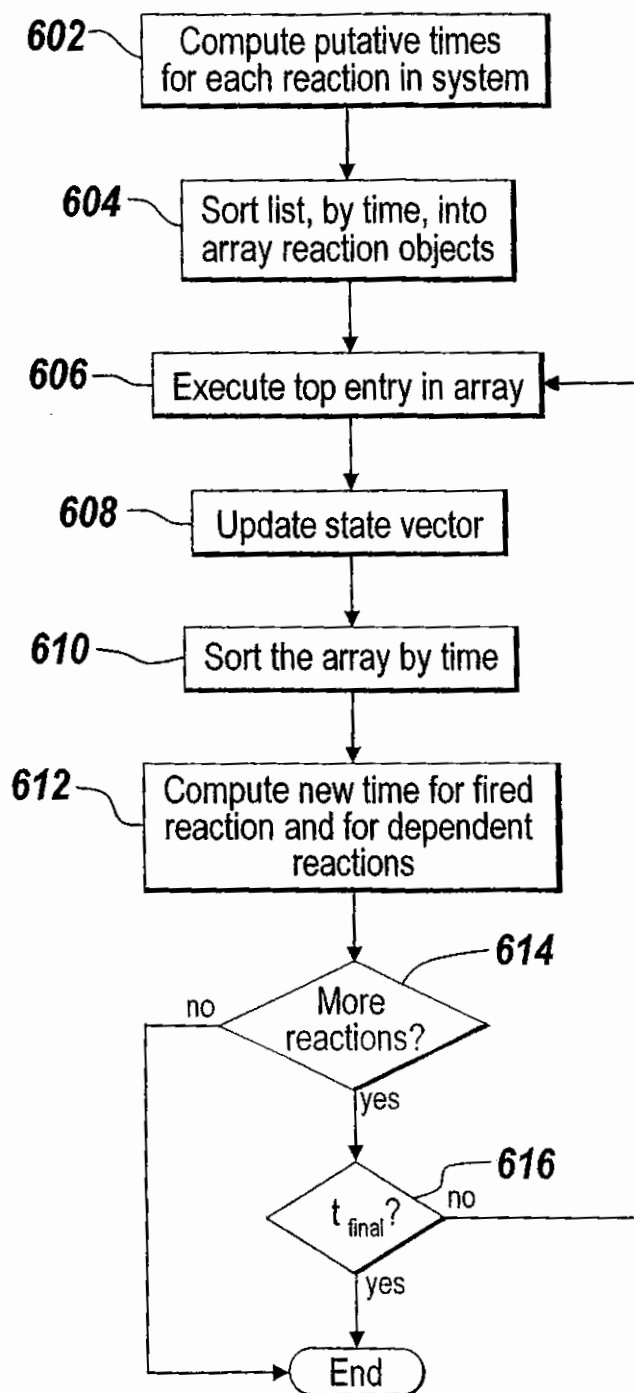
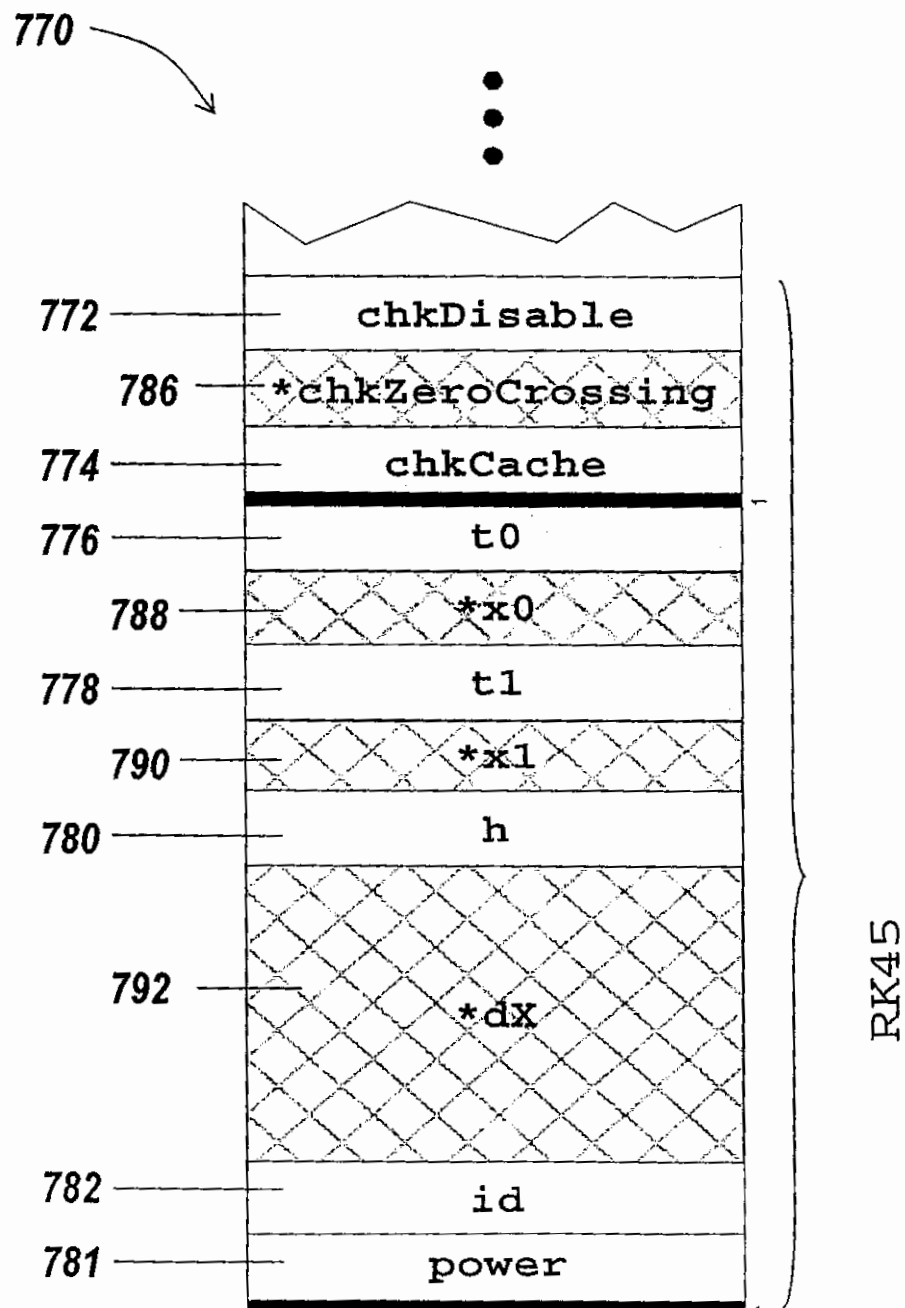


Fig. 4

*Fig. 5A**Fig. 5B**Fig. 5C*

*Fig. 6*

*Fig. 7*

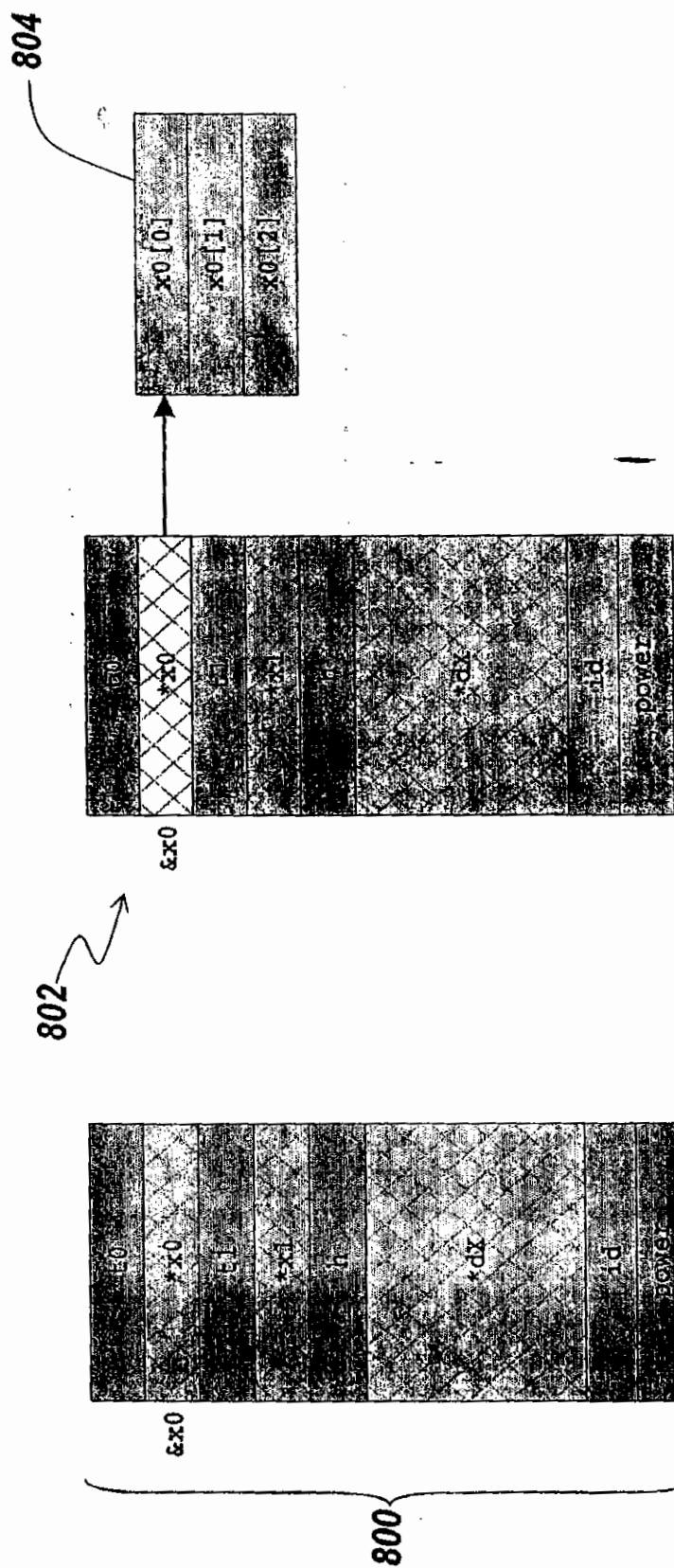
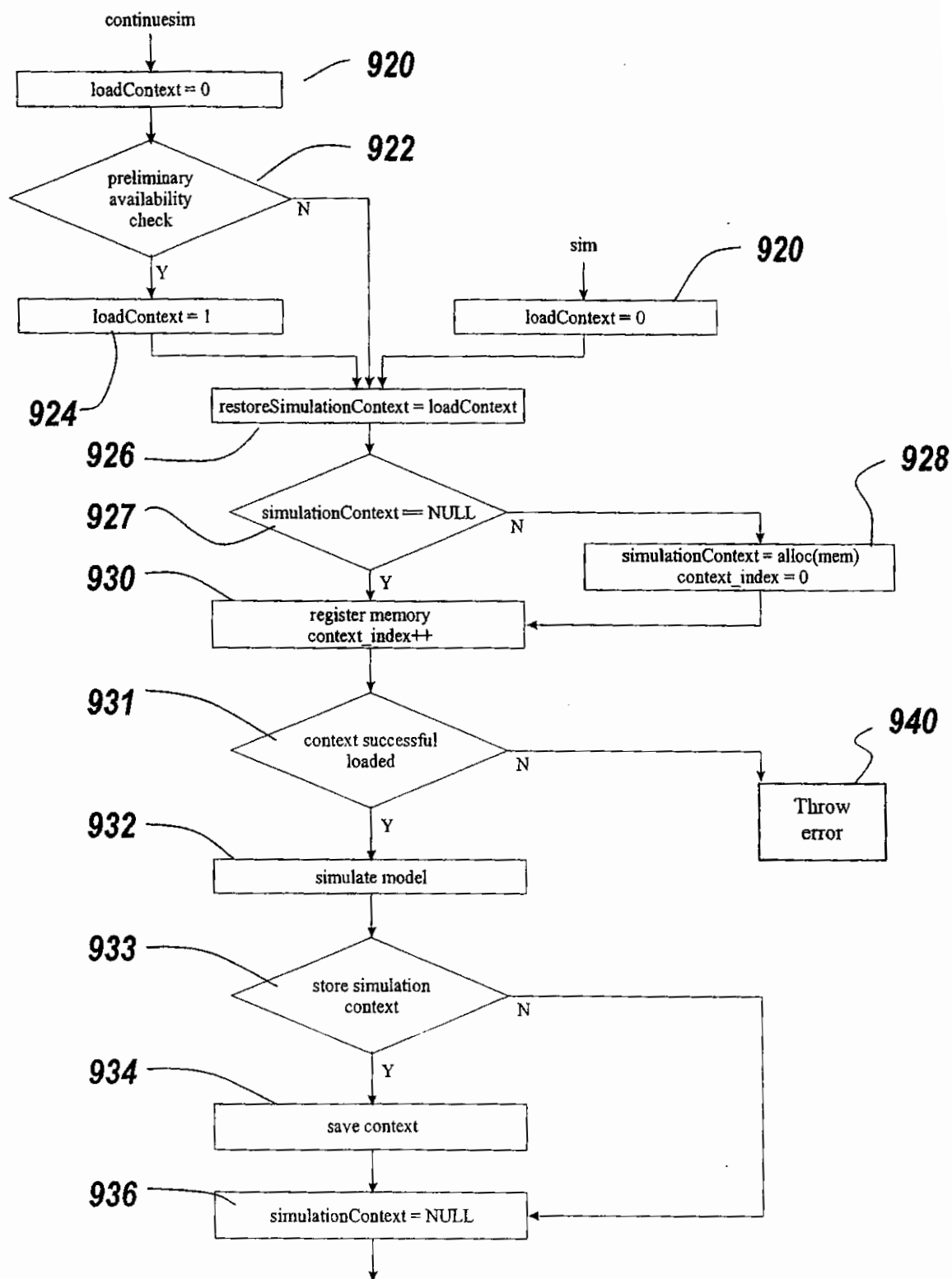


Fig. 8B

Fig. 8A

*Fig. 9*